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The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen Behaviors
and Other Outcomes

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy at Virginia Commonwealth University

by

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Virginia Commonwealth University
Richmond, Virginia
2016

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Dedication

To the police officers of the United States of America, especially the 188 who have fallen in the time that it took to complete this study.

Acknowledgements

I must first thank God for pulling (and sometimes dragging) me through this. There were times, more than I'd like to admit, that I wondered if this could actually be done. Here I stand, so it must be His will.

To my dissertation committee members, Dr. Cynthia Lum, Dr. Amy Cook, and Dr. Trisha Rhodes, thank you for your commitment to my success. I learned a great deal from each of you and I am blessed to have been enriched by each of your individual talents and perspectives. Thank you Dr. Will Pelfrey, my dissertation chair, for taking me on. I'll always remember meeting you for the first time and thinking: this is what a mentor looks like. You gave me time when I needed it and the push I also needed. I sincerely appreciate your support and am honored to have worked with you.

To the members of the Richmond and VCU Police Departments, you have taught me what I know to be true about policing, that it is an honorable and selfless labor of love with little reciprocity. I have built a career with each of you in mind and I thank you for that foundation.

To my small, but fiercely loyal, network of friends who helped in this journey by providing kindness and encouragement, I hope to have more time now to dedicate to our friendships. I owe each of you a piece of my sanity.

To a family who typifies the very essence of the word, I could never express the gratitude that I feel from your undying and relentless encouragement. You make me a better person and each of you has contributed to this accomplishment in your own very special way. Your unwavering love and support brought me to this day.

To Nick, the person who has sacrificed the most, I can only hope that what you've witnessed during your childhood has shown you that you can accomplish anything that is in your heart and mind. You've asked me more times than I can remember and I can finally say, I am done.

The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen Behaviors
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By: Shana M. Mell

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Philosophy, Public Policy & Administration at Virginia Commonwealth University.

Virginia Commonwealth University, 2016

Major Director: Dr. William V. Pelfrey, Jr., Associate Professor, Criminal Justice and Chair,
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Abstract

Despite the fact that U.S. crime rates remain at their lowest point since the 1960s, and police misconduct appears to have curtailed in recent decades (Kemshall, 2013), American policing is shaped by an array of challenges. Police must respond to the diverse and often conflicting expectations of the community, media, political figures, and their own employees, which is a complicated balancing act.

Police are expected to address crime and maintain order, yet police today are held to higher expectations of accountability, effectiveness, and efficiency than ever before. A number of technological advancements, national and international security concerns, economic and budgetary constraints, and evolving ideological trends have changed the landscape of policing globally. The 21st century public seeks real-time exposure to transparent police practices that address issues such as race, gender, and cultural biases. Citizens nation-wide are deploying their own audio and video recording devices to capture police actions and expect law enforcement to utilize body worn cameras, in-car cameras, and surveillance cameras to solve crimes and resolve administrative matters. Just as forensic evidence revolutionized policing expectations in the

1990s, citizens' expectation that body worn camera (BWC) programs be implemented represents a revolution in police accountability and may have implications for procedural justice.

Procedural justice is the means by which legitimacy is achieved and has become a common term since it originated within policing over forty years ago (National Research Council, 2004; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012; PERF, 2014). Police legitimacy is the ability of the police to exercise their authority in the course of maintaining order, resolving conflicts, and solving problems (PERF, 2014). When police engage in more procedurally just behaviors, they increase citizen perceptions of police legitimacy (National Research Council, 2004; Tyler & Jackson, 2012; PERF, 2014).

The procedural justice and police legitimacy literature suggests that by exhibiting certain behaviors within police-citizen encounters (i.e. asking a citizen to tell their side of the story and explaining the reasons for officer decisions), officers are considered legitimate by the public – and that legitimacy extends to the agency that employs those officers and to law enforcement generally (PERF, 2014; Tyler & Jackson, 2012). Analyzing interactions between officers and citizens, which are measured to provide greater insight and improvement of police practice, can assess procedurally just behaviors. These encounters are generally observed by researchers in the field or studied through citizen surveys following a police-citizen interaction.

This study examines procedural justice through systematic observations of police-citizen encounters recorded by BWCs in one mid-Atlantic police agency. Four elements of procedural justice are assessed to determine police behavior and its outcomes. The four pillars of procedural justice are participation, neutrality, dignity and respect, and trustworthiness (PERF, 2014; Tyler & Jackson, 2012) and these elements are expressed through behaviors exhibited during police-citizen contacts. The research questions concern how police acting in procedurally just ways

may influence citizen behaviors. This study seeks to contribute to the procedural justice literature and offer practical application to police leaders. The research design is offered as a format for future research as BWC programs expand throughout the nation. Agencies can use this knowledge to deploy targeted training programs aimed at increasing police legitimacy through enhanced procedural justice.

Descriptive statistics indicate high levels of procedural justice and regression analyses suggest that procedural justice may predict positive citizen behaviors within police-citizen encounters. This study highlights the significance of procedural justice as an antecedent to police legitimacy.

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Definitions and Key Terms

Key terms have been identified and defined in an attempt to ensure that concepts are clear and distinct.

Body worn cameras (BWC) are mini video cameras mounted on a police officer's body or uniform and worn throughout their shift to capture incidents that transpire during the officer's work. This equipment provides an audio/video recording of events in which police officers engage. These recordings can be useful for the documentation of evidence, preparation of offense reports, and future court testimony. The recordings can also protect employees from false allegations of misconduct and be of use when debriefing incidents or evaluating performance.

Community-oriented policing (COP), also known as community policing, is a "philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques, to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime" (COPS, 2014 p. 3). "Community policing emphasizes proactive problem solving in a systematic and routine fashion. Rather than responding to crime only after it occurs, community policing encourages agencies to proactively develop solutions to the immediate underlying conditions contributing to public safety problems" (COPS, 2014 p. 12).

Evidence.com is the web-based software program provided by Taser, Inc. used to preserve and locate digital BWC evidence by date, title or key words. The digital evidence chain of custody is ensured through evidence data hashing and detailed audit logs. Data permissions are customized to safeguard authorization and distribution of footage.

Hawthorne effect, also known as the observer effect, is the reactivity whereby individuals whose actions are being observed, modify or improve behavior due to the consciousness of being observed. This notion suggests that temporary increases in productivity or positive behaviors by participants are based on an awareness of being researched (Frankfort-Nachmias & Nachmias, 2008).

Nonparticipant observation research is a data collection method used extensively in case study research in which the researcher enters a social system to observe events, activities, and interactions with the aim of gaining a direct understanding of a phenomenon in its natural context (Frankfort-Nachmias & Nachmias, 2008). As a nonparticipant, the observer does not participate directly in the activities being observed but rather observes them from an alternate location without engaging in the interactions that are occurring (Frankfort-Nachmias & Nachmias, 2008).

Observation is the description of events, behaviors, and artifacts in the social setting chosen for study. Observations enable the researcher to describe existing situations applying the five senses to the situation under study (Frankfort-Nachmias & Nachmias, 2008).

Observational research (or field research) is a type of correlational (non-experimental) research in which a researcher observes ongoing behavior (Frankfort-Nachmias & Nachmias, 2008).

Police legitimacy refers to the perspective that the police should possess the ability to exercise authority to maintain social order, manage conflicts and solve problems in their communities through trust and confidence, deferring to the law, and acting in a morally just and appropriate manner (PERF, 2014).

Procedural justice is the means by which police are able to achieve legitimacy. The concept is based upon four tenets: citizens desire the opportunity to explain their situation, react positively to evidence that the authorities with whom they are dealing are neutral, are sensitive to whether they are treated with dignity and respect, and focus on cues that communicate trustworthiness (PERF, 2014). The four tenant (or pillars) of procedural justice are known as “informal” procedural justice concepts within policing literature as they are based upon the experiences that people have with authority figures.

Systematic social observation (SSO) is observational research conducted according to a set of systematic rules and procedures that provide an approach using measurable techniques that can be replicated and aimed at scientific inference (Mastrofski, Parks, & McCluskey, 2010).

Chapter 1: Introduction

Police departments in the United States face a range of challenges (Brody, DeMarco, & Lovrich, 2002; Cordner, 1997; Ford, Weissbein, & Plamondon, 2003). Daily responsibilities include responding to routine and emergency calls for service followed by investigating crimes and addressing the needs of the community; all while maintaining order and security in the midst of organized crime, cybercrime, and terrorist threats. The modern policing framework is vast and includes managing an extremely complex, evolving set of issues (Lurigio & Rosenbaum, 1994). The intent of this section is to discuss this concept by briefly outlining the current state of police-citizen relations and several challenges that impact this relationship as well as concepts that offer ways to strengthen ties between the police and the citizens that they serve.

Police Citizen Relations

The mid-20th-century model known as professional crime fighting arguably isolated police departments from communities (Maguire, 1997). The insularity of police departments was addressed in the 1980s and 1990s, when community-oriented policing emerged (Maguire, 1997). Community-oriented policing or community policing, is a philosophy that encourages strategies, drawn from partnerships and problem-solving methods, to combat the conditions that give rise to crime, social disorder, and fear of crime (COPS, 2014). Community-oriented policing shifts police focus from crime control and order maintenance to community engagement and relationship building. Community policing emphasizes routine and robust proactivity and problem solving. Community policing emboldens organizations to address the underlying conditions contributing to public safety problems rather than simply reacting to incidents once they have occurred (COPS, 2014).

As American policing has shifted during the past century, the characteristics of policing have changed and expectations of police work have evolved (Brody, DeMarco, & Lovrich, 2002; Cordner, 1997; Lurigio & Rosenbaum, 1994; Ford et al., 2003; Pelfrey, 2004). Relationships between police and the citizens whom they serve is the subject of much research and debate (PERF, 2014; President's Task Force on 21st Century Policing, 2015). The unique role of the police within American society positions officers to function in countless roles and responsibilities, often under a spotlight by the media or general public (PERF, 2014; President's Task Force on 21st Century Policing, 2015). As police exercise their authority, their actions are routinely exposed to critique and public evaluation. As such, the burden to appear fair and professional while maintaining high levels of effectiveness within the community is a growing concern for agencies nation-wide (PERF, 2014).

The law enforcement community is under great public scrutiny (President's Task Force on 21st Century Policing, 2015). Recent events have triggered a tense debate regarding bias-based policing, implicit bias, excessive force, and administrative investigations. Black Lives Matter, an activist movement in the United States that began after the July 2013 acquittal of George Zimmerman in the Florida shooting death of Trayvon Martin, has gained international acclaim (Day, 2015). The Black Lives Matter movement protests police brutality and injustice against blacks (Day, 2015). The movement was renewed following several 2014 deaths that did not result in grand jury indictments of the officers involved. Several media organizations have referred to it as a new civil rights faction but critics have labeled the movement a hate group (Day, 2015; Fields, 2015). The emergence of the Black Lives Matter movement that has taken to the streets and social and print media outlets indicate a breakdown in public support of the police, specifically regarding the treatment of black Americans (Fields, 2015). The following

high profile incidents contributed to and continue to shape the national and global dialogue regarding police-citizen relations (Mendoza, 2015).

Table 1: Police use of force incidents

Date	Incident
August 9, 2014	A white police officer named Darren Wilson shot and killed an unarmed black teenager named Michael Brown in Ferguson, Missouri. Bystander reports that he had his hands up in the air, which were later discredited, prompted protests, civil disobedience, and violence for ten days in Ferguson and around the United States. Based on the evidence offered by the state of Missouri, a grand jury ruled that the officer would not face criminal charges which led to a national discussion about the treatment of black people by white police officers.
July 17, 2014	A 43-year old arrestee named Eric Garner died on July 17, 2014 in New York after being arrested for illegally selling single cigarettes. Video footage showed the arresting police officer deploying a chokehold technique to restrain him. He was wrestled to the ground by several police officers after a nearby merchant complained about his illegal activity. He later died of the combination of the chokehold, compression of his chest, and poor health. The video showed Garner stating that he could not breathe which prompted protesters to chant those same words after Officer Daniel Pantaleo, the only officer investigated by a grand jury, was not indicted.
August 5, 2014	A 22-year-old black male named John Crawford III was shot and killed by a Beavercreek police officer named Sean Williams, in a Wal-Mart store in Ohio while holding a BB gun. A grand jury declined to indict the two involved officers. His death led to local protests.
August 11, 2014	A mentally ill 25-year-old named Exell Ford was shot by two Los Angeles police officers. According to the Los Angeles Police Department, the officers tried to stop him and a struggle ensued. The officers stated that Ford attempted to disarm one of the officers. The administrative investigation concluded that one officer had been justified in the shooting, while the other officer was unjustified and had acted outside of LAPD policy and violated Ford's civil rights by detaining him.
November 20, 2014	An Asian officer shot a 28-year-old black man named Akai Gurley, in a dimly lit staircase in a Brooklyn, New York apartment block. Officer Peter Liang was charged with manslaughter.
November 22, 2014	A Cleveland, Ohio police officer shot 12-year-old Tamir Rice in a park while he was playing with a BB gun. It was reported at the time that a man called the police about someone brandishing a pistol that was likely a fake. The police claimed that Rice reached into his waistband for the gun when the two officers ordered him to raise his hands. The family filed suit against the officers and the city of Cleveland based upon the circumstances in the case and the officers' alleged failure to provide first

	aid.
December 23, 2014	A black teenager named Antonio Martin was shot in Berkeley, Missouri after he pointed a handgun at a white male police officer. The police reported that Martin was a known suspect but protests took place as police-citizen relations declined in Missouri based on earlier events.
February 6, 2015	An Indian man named Sureshbhal Patel was left partially paralyzed after excessive force was applied by an Alabama police officer. The FBI has investigated the incident and a police officer was terminated, arrested, charged and pled guilty to assault. A video released by the police depicts the officer throwing Patel to the ground after officers stopped the man who spoke very little English and was unlikely able to communicate effectively with authorities.
March 6, 2015	A black 19-year-old male named Tony Terrell Robinson was killed by a Madison, Wisconsin police officer on the eve of the commemoration of the 50th anniversary of the repression of a protest demanding civil rights for blacks in Selma, Alabama.
March 9, 2015	A white police officer in Georgia killed an unarmed 27-year-old black man named Anthony Hill, who reportedly suffered from mental illness. He was said to have jumped on a police officer, naked, prior to force being applied.
April 2, 2015	A 73-year-old Oklahoma police officer accidentally shot and killed 40-year-old Eric Harris when he resisted arrest. Reports indicate that the retired police officer that was serving in a reserve capacity, mistook his firearm for his Taser.
April 4, 2015	Walter Scott was pulled over for a broken brake light in North Charleston, South Carolina. He got out of the car to run away, when he was shot eight times. Officer Slager was charged with murder after an independent video emerged showing him shooting Scott in the back.
April 12, 2015	A 25-year-old black man named Freddie Gray was arrested by the Baltimore Police Department for possessing an illegal switchblade. While being transported in a police van, Gray fell into a coma and was taken to the emergency room where he subsequently died from injuries to his spinal cord. Gray's death sparked the 2015 Baltimore protests and triggered a Department of Justice inquiry into the Baltimore Police Department's current practices. Six Baltimore police officers were charged in his death but the controversial charges were later dropped. The police wagon used to transport Gray, along with several other vehicles, was marked with paint in the arrest containment area that depicted, "enjoy the ride."
July 10, 2015	Police stopped Sandra Bland, 28, for failing to use her signal when changing lanes. Dash cam video shows the situation quickly escalating between Bland and Officer Brian Encinia. Bland was arrested for assaulting a police officer. She was found dead in her cell three days later, in what the coroner ruled a suicide. Officer Encinia was fired and indicted for perjury for a statement that he made regarding the circumstances of her arrest.

July 5, 2016	Alton Sterling, a 37-year-old black man, was shot in a parking lot in Baton Rouge, Louisiana. Baton Rouge police officers were responding to reports of an armed party at a convenience store. Bystander video shows that Sterling was on the ground when he was shot. Witnesses gave conflicting accounts about whether he had a gun.
July 6, 2016	A 32-year-old black male named Philando Castile was shot in Falcon Heights, Minnesota during a traffic stop. Castile told the officer that he had a firearm in the car. A woman in the car said he was reaching for his wallet when the officer shot him. The incident was captured on Facebook Live.

These incidents provide a compelling illustration of recent and provocative occurrences between the police and citizens in American communities. The “hands up, don’t shoot” refrain launched countless protests and calls for accountability within law enforcement, specifically toward minorities who have been killed or injured during police encounters. The phrase followed the police shooting of Michael Brown in Ferguson, Missouri in 2014. It originated after a witness of the shooting reported that Brown’s hands were in the air when he was fatally shot by Officer Darren Wilson of the Ferguson Police Department. Despite the fact that the investigation deemed witness testimony unreliable, the expression is still present within international reports of police-involved shootings or incidents where force was applied (Day, 2015). It extends well beyond the Ferguson, Missouri incident and has become a battle cry against the police.

The discussion of police accountability and protocol within these types of incidents involves concepts that are only partially understood by the public and the media, who are not educated in police tactics and internal use of force policy. Highly publicized incidents between police and citizens such as those outlined above have left communities, primarily those in high-crime, urban areas, challenging conduct of the police and skeptical of police motivations. These types of incidents are customary for those living in socially disadvantaged communities as

racially motivated law enforcement practices are broadly documented in American history (Jones-Brown & Terry, 2004).

Allegations of police misconduct tend to produce adverse interactions between police and the citizens that they serve (Carr, Napolitano, & Keating, 2007). The lack of trust in the police is so imbedded within some communities that anger and resentment toward officers is exhibited during even the most neutral encounters (Carr, et al., 2007; Jones-Brown & Terry, 2004; Weitzer, 2006). This negativity leads to feelings of inequity and hostility – emotions that are often passed down from one generation to the next (Antrobus, Bradford, Murphy, & Sargeant, 2015; Carr, Napolitano, & Keating, 2007; Jones-Brown & Terry, 2004; Weitzer, 2006). One of the many consequences of this distrust is that crime victims and bystanders are uncooperative when a crime occurs which hampers investigations and contributes to lower clearance rates (Antrobus, et al., 2015). The cycle continues as offenders are often not imprisoned and continue to commit crimes in these socially disadvantaged communities, which leads to heightened levels of fear and police distrust (Avakame, Fyfe, & McCoy, 1999).

Public Perception of Police

Public perception of the police is a subjective but vital component within the field. The unique nature of policing relies upon a mutual understanding of perception as an integral first step toward improving police-citizen relations (Schulhofer, Tyler & Huq, 2011; Tyler, 2004, 2009, 2011, Tyler & Jackson, 2012). Research indicates that citizens are not able to accurately assess police on issues of legality (Tyler, 2004). Tyler (2004) suggested that citizens are less likely to fully understand legal processes (i.e. police use of force, administrative investigations, and grand jury indictments) than they are to gauge the ways in which they are treated during encounters with the police. Perception of legitimate police behavior is generally based upon

personal experiences and highly publicized law enforcement matters (Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). While citizens are not educated in law enforcement policies and procedures, they are able to assess the police on how officers treat them during an encounter (Schulhofer et al., 2011; Tyler, 2004, 2009, 2011, Tyler & Jackson, 2012). This treatment is then assessed at the individual level and leads to a general perception of the police as a group as citizens share their experiences with family and friends. Fair treatment tends to contribute to greater levels of police legitimacy (PERF, 2014). Police are viewed as legitimate when they are able to exercise their authority to maintain order, manage conflicts, and solve problems in the communities they serve (Schulhofer et. al, 2011; Tyler, 2004, 2009, 2011, Tyler & Jackson, 2012).

Police legitimacy is a prominently featured concept within the national conversation surrounding the relationship between citizens and the police (National Research Council, 2004; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012). Reliant upon positive public perception, police legitimacy reflects three interrelated principles. The first is that the public has trust and confidence in the police and their honesty. The second is that the public's confidence leads to a willingness to defer to the law and comply with police authority. The third is that this exhibited compliance denotes a belief that the police are ethically justified and fair in their actions (PERF, 2014).

Given the significance of police legitimacy and its importance at the citizen, community, and national levels, researchers have sought to conceptualize methods for acquiring it (National Research Council, 2004; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012). Thibaut and Walker (1975) first introduced the concept of procedural justice as a means of enhancing legitimacy. They suggested that fair police practices could lead to a greater acceptance of undesired

outcomes (i.e. punitive measures such as a citation or an arrest) (Thibaut & Walker, 1975).

When the public perceives the intentions of the police as fair, they tend to possess higher levels of legitimacy for two distinct reasons (Kunard & Moe, 2015; Tankebe, 2009; Tyler & Wakslak, 2004). First, perception of fair and equitable treatment by the police is strongly correlated with police legitimacy (Schulhofer et al., 2011; Tyler, 2004, 2009, 2011; Tyler & Fagan, 2008).

Secondly, police legitimacy leads to a heightened willingness to cooperate, obedience of the law, and communication, all of which provide a platform upon which the police have a greater ability to function in their role (Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008). Citizens who reported fair treatment by the police were also more likely to comply with police requests, accept the outcome of the encounter, provide police with necessary information, and assist with case closure (Mastrofski, Snipes, & Supina, 1996; McCluskey, 2003; Paternoster, Brame, Bachman, & Sherman, 1997; Tyler & Huo, 2002).

Kunard and Moe (2015) further deconstructed the concept of procedural justice by way of an incident's *process* and the *outcome*. They stated that a citizen's assessment of an interaction with an officer is based on both the *process* (the way the officer came to make the decision and the ways in which the officer engaged the citizen in the decision-making process) as well as the *outcome* (the decision that the officer ultimately makes) of the encounter.

Kunard and Moe (2015) outlined four distinct pillars (or concepts) of procedural justice. They suggest that methodical application of these behaviors during encounters are likely to lead to higher levels of citizen cooperation and satisfaction, even when the outcome is unfavorable:

Fairness and consistency of rule of application - The concept that the processes used to reach an outcome matters more than the outcome itself. Decision-making, respectful dialogue, and the process by which an outcome is arrived matters more than the outcome itself.

Voice and representation in the process – The concept that citizens' viewpoints are requested, heard and considered before a decision is made.

Transparency and openness of process – The concept that the transparency of officers' behaviors and decisions are more significant than the outcome of the encounter.

Impartiality and unbiased decision making – The concept that decisions are made based on evidence rather than opinion or conjecture and that these decisions are comprehensively explained.

Fairness and neutrality, as key components of procedural justice, are associated with trust. The need for police to demonstrate high levels of neutrality, trustworthiness, and respect during citizen contacts can add to feelings of legitimacy (Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008). The public's feeling of trust and confidence in the police is as important within policing as curtailing crime and enhancing public safety (Haas, Van Craen, Skogan, & Fleitas, 2015). Procedural justice assists in combatting negative feelings toward the police. Law enforcement agencies work with researchers to better understand ways in which they may improve police legitimacy within their communities. Raising the level of trust and confidence of the citizens that they serve is as significant as effectively addressing crime and disorder (Haas et al., 2015).

Current Study

This dissertation seeks to advance the discussion of procedural justice by studying police behavior using systematic observations of patrol officers' interactions with the public. By doing so, the researcher attempts to contribute to the measurement of procedural justice, specifically when using observations to test Tyler's (2004) process-based model, which suggests that police can heighten their perceived legitimacy and trustworthiness when they exercise their authority in a procedurally fair manner. Research indicates that if police officers behave in a manner that is

considered procedurally just, citizen cooperation and compliance with the law may be enhanced (Mastrofski et al., 1996; McCluskey, 2003; Paternoster, et al., 1997; Tyler & Huo, 2002). There is a limited body of research employing measures of procedural justice that are based upon systematic observations of police-citizen contacts (Jonathan-Zamir, Mastrofski, & Moyal, 2013). This study seeks to expand that research by using distinct, conceptual elements of procedural justice to assess officers in the field through observations provided by body-worn camera recordings. This study employs a modified replication of the design created by Jonathan-Zamir, Mastrofski, and Moyal (2013) to measure procedural justice in police-citizen encounters in the field.

The researcher seeks to further understand the levels of fairness exhibited by officers toward the public during their contacts, how characteristics of the situation, the officer, and citizens might influence the type of treatment individuals receive when engaged by the police, and how an officer's approach to community interactions may impact the behavior of citizens. This research will expand the extant knowledge on the nature of police-citizen interactions and produce findings, which will inform policy, training, and police practices.

Police-citizen interactions were observed in their natural setting and contrasted with perceptions of procedural justice within the agency. This methodology utilized survey data collected through online questionnaires and systematic social observation data collected through assessments of recorded police-citizen contacts. Patrol officers captured these contacts through BWC footage recorded during routine activities and encounters. Researchers observing individuals generally assess observations of police behavior by accompanying them in the field (Jonathan-Zamir, et al., 2013). This research attempts to minimize the Hawthorne effect due to assessment of observations (Mayo, 1945) that have occurred in an officer's natural setting,

devoid of researchers. While the officers engaged in their work are aware of the recording that is taking place, a comfort level with the recording equipment that they wear on a daily basis may reduce the Hawthorne effect that can be caused by researchers conducting observations in person.

The observation protocol employed within this study is an adaptation of the instrument used by Jonathan-Zamir et al. (2013) in their study measuring procedural justice in police-citizen contacts. Their protocols, founded in earlier studies (such as those conducted by Mastrofski et al. (1996), McCluskey et al. (1999), Dai, Frank, and Sun (2011), and Mazerolle et al. (2012)), capture police behaviors that presumably encourage citizen feelings of fairness (Jonathan-Zamir et al., 2013). Jonathan-Zamir and colleagues (2013) offered indices for each of the four pillars of procedural justice (participation, neutrality, dignity/respect, and trustworthiness) as well as a comprehensive procedural justice scale created by combining the previous four indices (Jonathan-Zamir et al., 2013). These measures have been tested for validity and provide a useful way to assess procedural justice through observation.

Observation data was juxtaposed with survey data conducted through the use of an online questionnaire that explored procedural justice from the officer's perspective. Survey data were collected to frame officer perceptions. Observations of police officer and citizen behaviors exhibited during the incident measured officers' procedural justice behaviors. These data were generated outside of the scope of the researcher's study within officers' official duties. The recordings were the property of the agency and the researcher's use of the recordings was ancillary to their primary purpose.

The literature describes the characteristics of procedural justice in the context of police legitimacy. An explanatory design was utilized to study the relationship between officer and

citizen behaviors. This approach assessed officer and citizen behaviors as they interact with one another, and prompted the following research questions.

1. How do officers exercise different levels of procedural justice?
2. How do characteristics of the situation, the officer, and the citizens influence the type of treatment citizens receive?
3. What effect do officers' procedurally just behaviors have on citizen behaviors toward police?

This study may contribute to the understanding of procedural justice mechanisms in the field, posing significant questions to guide future research, and offering a new way to study procedural justice in police-citizen encounters. Limited systematic social observation studies exist within the procedural justice literature. This study represents the first procedural justice analysis conducted through observations captured using BWC programs. Knowledge and understanding of the ways in which officers demonstrate procedurally just behaviors in citizen contacts should provide insight into police legitimacy at the officer, organization, and industry levels.

Research of this kind may be significant to police leaders contemplating approaches for assessing and enhancing procedural justice within their organizations. This research will also inform scholars seeking new methods of assessing procedural justice in the field. Procedural justice is a renewed axiom within the policing profession and this study serves to bridge the gap between theory and practice for law enforcement practitioners by introducing a way in which agencies may assess officer interactions to better understand the levels of procedurally just behaviors exhibited by their officers. Once police leaders are informed of the current state of procedural justice within (or outside of) their jurisdiction, they may elect to create targeted programs for increasing procedural justice within their jurisdictions.

This study may yield valuable results due to the mixed methods research design. The need for officer input regarding paradigm shifts at the organizational level is well documented in the literature (Reiss, 1999). Practically, empowering employees to share their perceptions with management in a scientifically robust manner may contribute to increased morale and offer opportunities to receive feedback from the front line. Survey data, when contrasted with observation data, connects attitudes toward procedural justice with their behaviors in the field as observed by a trained researcher. This integration provides greater insight into the problem of negative police-citizen interactions by exploring citizen responses to officers' approach to procedural justice. The study adds to observational research by elaborating such methodological issues of a non-participatory observation design through the use of a quantitative data collection protocol. There are a limited number of systematic social observation studies in existence, specifically regarding police-citizen interactions.

Finally, BWC programs seem to be the wave of the future. As members of the public routinely record interactions, agencies the ability to combat misrepresentations. Agencies have come forward with BWC footage that accurately depicts encounters that might have been challenged otherwise. This footage allows agencies to portray reality from the perspective of the officer as never exhibited before. BWC programs may be comparable to the emergence of DNA evidence in the law enforcement field. The expenses of BWC programs will be justified by administrative complaint and use of force investigations but agencies will soon realize that the influx of data that they are generating (and storing at a cost of roughly \$1.50 per gigabyte) have utility beyond those originally intended. This study instructs agencies on ways in which they may utilize BWC data in a profound and innovative way. This knowledge can be applied toward targeted training and further evaluations of officer and citizen interactions.

Chapter One of the dissertation briefly reviewed the general concepts of procedural justice and police legitimacy and their relevance to modern problems. Chapter One outlined the purpose and significance of the study. Research questions and a brief summary of the design and method proposed for data collection, limitations of the research, and the definitions of key terms were also presented. Chapter Two reviews related literature and provides an overview of the current state of police-citizen relations. The literature review includes the concepts of procedural justice and police legitimacy as well the study, methodology, and measures of procedural justice. Chapter Three details the research methodology including the study design, population, key constructs, and instruments. The utility of systematic social observation is described. Chapter Four describes the results of the study. Chapter Five provides a discussion of the ways in which the results are situated within the procedural justice literature and policy implications. Future research considerations are ventured.

Chapter 2: Literature Review

Twenty-first century policing is quite complex. The responsibilities of the police continue to expand as police-citizen relationships are increasingly strained. The expectation of police to meaningfully engage the community is met with tense relations and the potential for violence in the communities most in need of police services. The storied history between police and citizens coupled with high profile, adverse events contribute to the difficulties experienced by officers and certain segments of the American population. The legitimacy of the police is threatened by a lack of trust and cohesion between the police and the citizens with which they interact. To better understand the significance of police legitimacy, this literature review begins with an overview of the current state of police-citizen relations. This synopsis is followed by an explanation of the concepts of procedural justice and police legitimacy. Procedural justice assists in combatting intense and deep-seated feelings toward the police. The literature review discusses the ways in which procedural justice is studied and introduces the emergence of body worn cameras as a mechanism for advancing procedural justice and police legitimacy.

Current State of Police-Citizen Relations

The 24-hour news cycle, social media and citizen-recorded events question the legitimacy of the police. The media has a limited amount of information with which to generate a story at any given time, specifically regarding the confidential nature of police investigations and administrative matters. Invariably much of media reports are based upon statements from citizens involved rather than those educated in the matters being covered. Therefore, the story that is told for many months, as the department's legal and internal review processes continue, may be limited to subjective and interpretive information. Some suggest that this can negatively impact police-citizen relations and deteriorate public trust (Haas et al., 2015).

The police-involved shooting death of Michael Brown in Ferguson, Missouri prompted nationwide attention to the issues of police use of force, accountability and bias-based policing. Disparate views exist regarding public opinion and the police. While some recent surveys show faith in police, other polls indicate higher levels of distrust in the police (Nix, Wolfe, Rojek, & Kaminski, 2015; Wing, 2015). According to recent polls, overall confidence in police remains high (Nix et al., 2015; Wing, 2015). When asked about their local police department, 25 percent of respondents said they have a great deal of trust in police officers, while 36 percent reported they had a fair amount of trust (Wing, 2015). As for police officers nationwide, 19 percent reported they have a great deal of trust and 37 percent said they have a fair amount (Wing, 2015). White Americans were more likely to support the police; with 67 percent indicating some level of trust in their local police and 63 percent stating the same for police nationwide (Wing, 2015). Black Americans have expressed considerably less support, with 36 percent indicating some level of trust in their local police and only 27 percent saying the same for police nationwide (Nix et al., 2015; Wing, 2015). A 2014 Economist/YouGov survey indicated that 11 percent of respondents reported that they believe police officers are more honest than most people. Sixty-one percent said police officers are equally as honest, and 24 percent said they are less honest (Nix et al., 2015; Wing, 2015).

National survey results indicate that people may disregard media reports when it comes to forming their own opinion of law enforcement officers (Tyler & Jackson, 2012). Opinions may be formed by their own experiences with law enforcement agencies. The ways in which people are treated by officers and the behavior they actually observe in police-citizen encounters are the two major factors in determining citizen opinions (Tooley, 2015). This suggests that police agencies and individual officers across the United States may overestimate the ability of

the media to influence public opinion regarding policing (Tooley, 2015). A Montana State University survey indicated that 77 percent of respondents stated that media coverage of police departments did not impact their opinion of police officers either positively or negatively (Tooley, 2015). The remaining respondents reported that they gained a more positive view of policing through the media (Tooley, 2015). These data suggest that perceptions are controlled more through interactions with police than with external factors (Nix, et al., 2015; Tooley, 2015; Wing, 2015).

Roughly 900,000 sworn officers belonging to just under 18,000 agencies come in contact with 40 million United States residents aged 16 or older, or about 17 percent of the population annually (BJS, 2011). Media coverage of the proliferation of police brutality has increased which may cause citizens to perceive that violence against arrestees has heightened. However, police killings of Americans are extremely rare. In fact, there is an overall decrease in police-involved deaths in the United States (BJS, 2015). Generally 99.9 percent of police arrests are uneventful (BJS, 2015). In the past 50 years, the rate of black Americans killed by police has dropped 70 percent. In 2012, 123 black Americans were shot and killed by police (BJS, 2015). There are currently more than 43 million black citizens residing in the United States. In 2012, 326 white Americans were killed by police officers (BJS, 2015). These statistics are not generally included in the story that the media is telling and the resulting actions that have transpired.

Recent events such as those in Ferguson, New York, Cleveland, Baltimore, and Baton Rouge depict rising tensions between the police and the communities that they serve. Despite several decades of community policing efforts, police agencies do not enjoy positive relations in certain segments of the community. Negative images of police-citizen relations permeate

television, radio and the media, shining a spotlight on the lack of trust and legitimacy of American policing (Antrobus, et al., 2015). Since the initiation of the community policing paradigm within law enforcement, agency leaders have acknowledged the significance of positive ties within their communities by investing resources in initiatives directed toward building relationships (Gau & Brunson, 2010). Agencies nation-wide experienced great successes (Gau et al., 2012). However, recent incidents of violence and unrest, along with public outcry and negative response illustrate that some gaps remain in achieving this goal.

The relationship between citizens and the police is complicated. The United States is a fusion of varying cultures, ethnicities, religions, and customs. Each American community contains citizens of differing color, gender, age, religion, socioeconomic status and culture. These subgroups of society have distinct needs and challenges, which require a multitude of approaches in how officers engage all elements of the community (Fagan & Davies, 2000).

Law enforcement, as a part of the criminal justice system, is also a subgroup of its own (Ford, et al., 2003). Agencies varying in size and scope each have their own policies and procedures for enforcing the law and maintaining order. Assorted police organizations and practices, combined with diverse communities, heighten the complexity of police-citizen relations (Ford et. al, 2003).

The ability of police to build relationships with the community should also be studied through a historical perspective (Adams, Rohe, & Arcury, 2002). Police-citizen relations have made significant progress in addressing civil liberties issues since the Civil Rights Act of 1964 (Antrobus et al., 2015). There is a particular history of distrust between minority communities and the police that has created tension between the two groups (Antrobus et al., 2015). This led to feelings of marginalization within minority groups that created perceptions of mistreatment by

the police as well as all entities within the criminal justice system and government agencies (Bayley & Mendelsohn, 1969; Antrobus et al., 2015). Historically, and extending into present day, distinct segments of American culture, predominantly minority communities, report experiencing a multitude of real or perceived injustices that extend throughout social systems (Brunson & Miller, 2006; Carr, et al., 2007; Bradford, 2014). These disparities, including access to equitable education, economic challenges, and shortages of resource and service allocation, tend to erode relationships between the community and governmental organizations of which the police are an element (Engel, 2003; Engel, Sobol, & Worden, 2000; Gau & Brunson, 2010).

The complexity of police-citizen relationships contributes to the unique lens through which each group perceives engagement (Gau et. al, 2012). This is true for each distinct community segment, as well as police entities. Each brings its own perception of the role of law enforcement in the community, shaped by historical and experiential components. The perspective of members of some communities across the country is one of being targeted, ostracized, and mistreated by the police. From the perspective of many minority groups, that view is ingrained in generations of hostile encounters with police, borne from the history of American race relations (Antrobus, et al., 2015). While many crime reduction policies are intended to impact crime rates, the unintended consequences tend to impact perceptions of fairness and trust (Antrobus, et al., 2015). The lack of trust in the police is so entrenched in some communities that police-citizen interactions create anger and resentment, which negatively impacts feelings of equity (Antrobus, et al., 2015). Parents seeking to protect their children against the police may be raising a generation of youth who distrust, rather than respect, the police. This continues with constantly emerging stories of real or perceived bias-based policing encounters and excessive uses of force against minority citizens.

The police perspective is very different as police officers face safety threats (i.e. high risk stops, use of force incidents, and police-involved shootings) on a daily basis (Greene, 1989). The ability to serve the community is diminished when officers are preoccupied with the dangers associated with their role within the community (Greene, 1989). Addressing citizen resentment and disrespect toward officers does more than thwart attempts to keep the peace (Kochel, Parks, & Mastrofski, 2013). These feelings, and the actions that ensue, deplete limited resources in law enforcement agencies. Police departments do not simply respond to incidents of crime – they address homeland security concerns, cyber issues, non-criminal calls for service, and nuisance matters (PERF, 2014). The civil unrest, general disobedience, and threats of violence toward the police take time and resources away from routine patrol and crime prevention responsibilities (PERF, 2014).

The complexity of communities makes the task of correctly responding to every incident unlikely (Mastrofski et al., 1998). The expectation is that the police handle all events properly and efficiently, even when faced with difficult, time-sensitive, and dangerous circumstances. The result is that law enforcement officers, and agencies as a whole, miss occasions that they may use to establish trust in the community or even damage existing levels of trust during an incident in which an officer fails to meet the expectations of the community (Murphy, Hinds, & Fleming, 2008). High profile incidents and allegations of police misconduct tend to drive a wedge between law enforcement officers and the citizens they are sworn to protect. Internal law enforcement policy and training address these concerns but police culture and implicit biases may contribute to negative stereotypes and police attitudes toward citizens, further disconnecting citizens from the officers who serve them (Coleman, 2005; Johnson, 2001; Macdonald & Stokes, 2006).

While the law enforcement community cannot singlehandedly solve problems steeped in American history, engagement across groups and systems is used as a tool to strengthen police-citizen relations in an effort to build and maintain trust in the government. Police agencies serve on the front line within these communities and therefore feel the impact of a lack of trust as significantly as the benefits of positive community ties. No single factor is as central within policing as the partnership between law enforcement agencies and the communities that they serve. The partnership instituted through positive police-citizen relations is immeasurable but reflected in a number of tangible objectives within the field.

Police generally recognize the importance of neighborhoods free from crime and disorder to increase perceptions of safety (Mastrofski et al., 1995). Despite the notion that community policing promotes heightened levels of discretion in making arrests, specifically with respect to the influence of extralegal considerations (Mastrofski et al., 1995), measurement of officer success rarely matches this goal. Metrics of officer success typically mirror the ways that police departments are assessed; through arrests statistics, crime levels, and clearance rates (Mastrofski et al., 1995). These forms of measurement do not correlate with community policing initiatives that have framed the community-policing era and are not indicative of community trust (Mastrofski et al., 1995). Therefore, the unintended consequence of well-meant policies is feelings of disenfranchisement and distrust.

Alternative methods of assessing police-citizen relations should focus on how police communicate with citizens and how citizens subsequently view and interact with police (Tyler, 2004). Citizens who have positive views of police may enable police to effectively reduce crime and maintain order. Police authoritativeness and public obedience are generally measures of successful police-citizen interactions. Research indicates that overall noncompliance rates are

about 20 percent (Mastrofski et al., 1996; Sherman, 1993). However, that 20 percent is the subsection of the community with which the police generally engage.

Procedural Justice and Police Legitimacy

Police agencies rely upon the support and cooperation of the public in order to fulfill their obligation to communities. They are most effective when that support transpires willingly (Tyler, 2004). In order to garner support, a connection based on a feeling that the police are genuine legal authorities and entitled to obedience is required (Tyler, 2004). This relationship is generally established through a public assessment of the ways in which police exercise their sworn authority through a provision that their authority is based upon fair and just principles (Tyler, & Huq, 2011; Tyler, 2004, 2009, 2011). This concept is known as procedural justice and it claims a prominent role in the dialogue regarding police and community relations (National Research Council, 2004; Schulhofer et al., 2011; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012).

Police legitimacy is important within a democratic society. In 2004, the National Academy of Sciences provided evidence of an increase in professionalism, sophistication and effectiveness of police departments in the United States (PERF, 2014). Despite improvements in the quality of policing over the last 30 years, public trust and confidence in the police has not increased, but rather maintained its consistency ranging from between 50 and 60 percent, even in light of decreases in violent crime (PERF, 2014). This discrepancy between the increasing level of police performance and generally unchanging levels of public support suggests that the police may not be capitalizing on achievements associated with these efforts. Researchers suggest that these accomplishments include enhanced public regard for the police during interactions, improved observance of the law, increased assistance with managing crime, and greater support

for police departments (National Research Council, 2004; Schulhofer et al., 2011; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012).

The public believes that the police are legitimate when they possess morally just – not merely legal – authority to enforce the law. Police legitimacy reflects the belief that the police are able to exercise their authority to maintain social order, manage conflicts and solve problems in their communities (Schulhofer et al., 2011; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012). Legitimacy extends beyond fear of police authority by instilling respect for the police. PERF (2014) reflects this concept in three judgments:

1. The first is public trust and confidence in the police. Such confidence involves the belief that the police are honest, that they try to do their jobs well, and that they are trying to protect the community against crime and violence.
2. Second, legitimacy reflects the willingness of residents to defer to the law and to police authority, i.e. their sense of obligation and responsibility to accept police authority.
3. Finally, legitimacy involves the belief that police actions are morally justified and appropriate to the circumstances (PERF, 2014).

The literature discusses a number of positive outcomes resulting from police legitimacy (National Research Council, 2004; Schulhofer et al., 2011; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012). People who view the police as legitimate are more engaged with the police. They are more likely to participate in community events and initiatives (Reisig, Bratton & Gertz, 2007) where they will likely garner a deeper familiarity and trust with the police. People are also more willing to report their own victimizations (Kochel, et al., 2012). Individuals report that they are more likely to comply with regulations pertaining to minor offenses when they trust the police (Gau, 2011; Murphy, Tyler & Curtis, 2009; Reisig et al., 2007; Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008; Tyler, Schulhofer, & Huq, 2010). They are also more willing

to report crimes that they witness within their communities and supply witness statements and suspect information to police during investigations of crime (Gau, 2011; Murphy, Tyler & Curtis, 2009; Reisig et al., 2007; Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008; Tyler, Schulhofer, & Huq, 2010). One study found that Muslim Americans were more likely to report information regarding potential terrorist plots when they viewed their local police as legitimate (Tyler et al., 2010). Contributing to the resolution of a case and reporting crimes to the police are extremely important within policing since the police cannot function without the assistance of the public.

Procedural justice is the means to achieving police legitimacy. As a theory, procedural justice is straightforward. Procedural justice represents a social-psychological framework of policing and its impact within police policy and community relations are noteworthy. PERF (2014) conceptualizes procedural justice through the following four views:

1. First, people want to have an opportunity to explain their situation or tell their side of the story to a police officer. This opportunity to make arguments and present evidence should occur before the police make decisions about what to do.
2. Second, people react to evidence that the authorities with whom they are dealing are neutral. This involves officers making decisions based upon consistently applied legal principles and the facts of an incident, not an officer's personal opinions and biases.
3. Third, people are sensitive to whether they are treated with dignity and politeness, and to whether their rights are respected. The issue of interpersonal treatment consistently emerges as a key factor in reactions to dealings with legal authorities. People believe that they are entitled to treatment with respect, and react very negatively to dismissive or demeaning interpersonal treatment.
4. Finally, people focus on cues that communicate information about the intentions and character (their "trustworthiness") of the legal authorities with whom they are dealing (PERF, 2014).

Procedural justice is comprised of two core elements that explain its significance within the police policy. The first addresses officers' ability to use facts and reason in their decision-making, rather than impulse (Gau, 2011; Reisig, et al., 2007). The second is that they employ respect and polite behaviors in their service delivery (Gau, 2011; Reisig, et al., 2007). Police officers serve as individual representatives of the police when they interact with members of society. When a police officer treats an individual with humanity and respect, the officer establishes the individual's status as a key member of society. When an officer is disparaging or unpleasant toward a citizen, the officer indicates that the police do not value the person as an important part of society.

Citizens' attitudes about whether police behave legitimately are generally based upon a particular encounter that they have had with the police or on broader criminal justice issues (Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). These perceptions vary within community subgroups and can affect a police department's efforts to meet organizational goals (Blader & Tyler, 2003). Trust in the police relies upon the extent to which the public believes that police actions are legitimate and procedurally just. Investigating and preventing crime requires cooperation with the police based on the notion that citizens are comfortable providing information to them and willingly obey the law (Tyler, 2001; 2002; 2004; 2006; 2009).

Kunard and Moe (2015) further deconstructed the concept of procedural justice by way of an incident's *process* and the *outcome*. They stated that a citizen's assessment of an interaction with an officer is based on both the *process* (the way the officer came to make the decision and the ways in which the officer engaged the citizen in the decision-making process) as well as the *outcome* (the decision that the officer ultimately makes) of the encounter.

Kunard and Moe (2015) outlined four distinct pillars (or concepts) of procedural justice. They suggest that methodical application of these behaviors during encounters are likely to lead to higher levels of cooperation and satisfaction at the conclusion of the encounter, even when the outcome is unfavorable:

Fairness and consistency of rule of application - The concept that the processes used to reach an outcome matters more than the outcome itself. Decision-making, respectful dialogue, and the process by which an outcome is arrived matters more than the outcome itself.

Voice and representation in the process – The concept that citizens’ viewpoints are requested, heard and considered before a decision is made.

Transparency and openness of process – The concept that the transparency of officers’ behaviors and decisions are more significant than the outcome of the encounter.

Impartiality and unbiased decision making – The concept that decisions are made based on evidence rather than opinion or conjecture and that these decisions are comprehensively explained.

When the public perceives their interactions as fair, the police garner higher levels of perceived legitimacy (Jonathan-Zamir et al., 2013; Kunard & Moe, 2015; Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). Viewing the police as legitimate may predispose citizens to respond with compliance, respect, and cooperation. Police departments therefore need legitimacy in order to function and tend to increase levels of legitimacy when they function well (Jonathan-Zamir et al., 2013; Kunard & Moe, 2015; Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). A growing body of research supports the importance of procedural justice in producing these outcomes but some critiques and measurement concerns have also surfaced and will be examined (Jonathan-Zamir et al., 2013).

Procedural justice has been recently reintroduced as an important focal point in policing strategy and professionalism; however, the concept is not a new one to police officers and law

enforcement leadership (Kunard & Moe, 2015). Procedural justice is typically examined in psychological terms and measured from the perspective of the citizen through the use of surveys and interviews (Blader & Tyler, 2003). Citizen feelings are significant due to the presumption that they influence assessments of police legitimacy and willingness to engage in cooperative behaviors (Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). Interviews and surveys are useful in examining citizen behaviors and subjective experiences (Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). This type of data collection provides only a subjective perspective (Jonathan-Zamir et al., 2013) and is a limitation within the literature regarding police behavior (Jonathan-Zamir et al., 2013; Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). Interviews and surveys do not fully capture the depth and breadth of the fair (or unfair) behaviors in which police officers generally engage (Jonathan-Zamir et al., 2013; Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). Data collected from systematic social observations of police interactions may be well-suited to illustrate the reasons behind and effects of different levels of procedural justice exercised in different situations as well as the ways in which characteristics of the situation, police officer, and citizens influence the types of treatment that citizens receive (Jonathan-Zamir et al., 2013).

The importance of the fairness of police processes, specifically those in which authority is exercised, known as procedural justice, is examined extensively in the literature (National Research Council, 2004; Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2004, 2009, 2011). The concept of procedural justice arose in Thibaut and Walker's (1975) groundbreaking research that suggested that when police processes are perceived to be fair, the acceptance of undesired outcomes (i.e. arrest) follows; ostensibly because fair police processes are considered indicative of fair outcomes. Lind and Tyler (1988) enhanced this notion by suggesting that fair

processes are significant predominantly because they send messages about their value and status within the group, which ultimately affect their identity and feelings of self-worth. While the literature suggests that some variation may exist regarding the significance of procedural justice juxtaposed with instrumental considerations in predicting police legitimacy (Brockner et al., 2001), it is widely accepted that procedural justice is fundamental when assessing police legitimacy (Hinds & Murphy, 2007; Tankebe, 2009).

Police legitimacy is considered a central tenet within democratic cultures (Tyler, 2006; Tyler & Fagan, 2008). There are two core themes regarding public perception of fair police practices. The first is that overall perception of fair police treatment is strongly correlated to the assessment of police legitimacy (Gau et al., 2012; Hinds & Murphy, 2007; Jonathan-Zamir & Weisburd, 2015; Kochel et al., 2013; Murphy et al., 2008; Reisig, et al., 2007; Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2001, 2004, 2009, 2011; Tyler & Fagan, 2008; Tyler et al., 2010). Police legitimacy is consistently associated with desired outcomes within community relations. When citizens view the police as legitimate, there may be an increase in desired outcomes of police-citizen relations (Reisig, et al., 2007; Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2001, 2004, 2009, 2011; Tyler & Fagan, 2008; Tyler et al., 2010). These outcomes include a heightened willingness to cooperate, providing assistance and information when needed, empowering the police to function within the scope of their duties, and overall compliance with the police and the law (Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008; Tyler et. al, 2007).

The second theme is that citizens who report fair treatment by the police are more likely to respond desirably (Mastrofski et al., 1996; McCluskey, 2003; Paternoster, et al., 1997; Tyler & Huo, 2002). These desirable responses include compliance with requests, acceptance of the

outcome of the encounter, providing police with necessary information, and assisting with case closure (Mastrofski et al., 1996; McCluskey, 2003; Paternoster et al., 1997; Tyler & Huo, 2002). There is also some indication of overall increases in satisfaction levels at the individual and community levels (McIver & Parks, 1983).

Application of Procedurally Just Behaviors in Police-Citizen Interactions

Studies indicate that when officers incorporate the four components of procedural justice into their interactions with the community, individuals are more likely to respond favorably because they see the police as legitimate (Bradford, Hohl, Jackson & MacQueen, 2015; Gau, 2011; Gau & Brunson, 2010; Hough et al., 2013; Jackson et al., 2014; Mazerolle et al., 2013; Murphy, 2009; Murphy & Cherney, 2011; Murphy et al., 2014; Reisig & Lloyd, 2009; Reisig et al., 2013; Sunshine & Tyler, 2003; Tankebe, 2009; Tankebe & Mesko, 2015; Wells, 2007). Increases in legitimacy have the potential to impact crime reduction by increasing compliant behaviors within the communities in which the police are most heavily involved. The correlation between perception of legitimacy and compliant behaviors indicates a potential link between community outreach efforts that increase levels of police legitimacy and crime reduction.

Characteristics of community policing could be combined with other effective interventions in ways that may enhance overall success. Sherman and Eck (2002) stated that the ability to prevent crime through employing procedural justice within police-citizen interactions could be enhanced through community policing strategies. This complements research indicating that police-citizen interactions targeting high crime neighborhoods with positive informal contacts may lead to decreases in victimization rates (Wycoff, 1985). Weisburd and colleagues (2011) suggest that hot spots policing can be further enhanced through a community-oriented approach focused on community consultation of the strategies employed to avoid

disrupting police-citizen relationships. The focus of these types of programs should be to reduce crime while seeking to improve, police-citizen relations and police legitimacy (Wycoff, 1994; Weisburd, Hinkle, Famega, & Ready, 2011).

Relating community policing programming with the components of procedural justice may be an effective way to address police legitimacy. Tyler's (2004) process-based model suggests that community policing may only slightly impact crime in the short-term, but that a more significant long-term positive relationship may emerge through increased levels of community satisfaction based on increased compliance with the law. Evidence of long-term effects was noted by Gill and colleagues (2014) who found that community policing was associated with greater citizen satisfaction, less perceived disorder, and increased police legitimacy. Mazerolle et al. (2013) examined police interventions designed to enhance procedural justice and increase citizen perceptions of police legitimacy. They studied interventions that focused on increasing legitimacy or incorporated at least one of Tyler's (2004) procedural justice components (participation, neutrality, dignity and respect, and trustworthy motives). Their study indicated that these interventions increased citizen satisfaction, cooperation, and procedural justice levels (Mazerolle et al., 2013). Though some variability exists among studies on perceptions of legitimacy, these interventions are highly regarded in the literature (Mazerolle et al., 2013).

While community-policing programs offer an opportunity to integrate procedural justice into policing, they are not the only possible approach. Mazerolle and colleagues (2013) found that brief procedurally just contacts within the community during police checkpoints enhanced perceptions of police legitimacy. Bennett and colleagues (2008) evaluated the effectiveness of neighborhood watch programs and highlighted the effectiveness of these programs in reducing

crime between as much as 16 and 26 percent. Using self-reports of young drivers, Bates, Allen, and Watson (2015) found in their traffic enforcement study that the inclusion of at least some of the elements of procedural justice in automated policing initiatives encourages citizen compliance.

Demographic and Situational Characteristics

Procedural justice research has not fully examined the sources of citizen behaviors, specifically the extent to which perceptions of police are influenced by racial, ethnic, and cultural identities. Engel (2005) found support for Tyler's (2004) suggestion that citizens are concerned with fair treatment by the police as well as incident outcomes. These findings indicate significant differences in perceptions of procedural justice by race (Engel, 2005). Lee, Steinberg, and Piquero (2010) studied the role of ethnicity in black juvenile offenders' regarding police discrimination, police interactions, procedural justice, and police legitimacy. They found that offenders with a stronger sense of ethnic identity perceived greater levels of police discrimination. This was juxtaposed with the offenders' positive beliefs surrounding police legitimacy. Kruger and colleagues (2016) conducted a study examining procedural justice and crime reporting. Their findings indicate that trust in police mediates the ways in which they interact with the police. They suggested that race and education were predictors of crime reporting levels and interaction with police (Kruger, Crichlow, McGarrell, Hollis, Jefferson, Reischl, & Zimmerman, 2016).

Schuck and Martin (2013) used survey data involving Chicago residents' perceptions of their most recent contact with the police. Their findings suggest that assessments of procedural justice differed greater between encounters that were initiated by the citizen and occurred within their community than those between race and ethnicity. The largest disparities involved Latinos

and whites within wealthier communities. They also found that police-citizen interactions that took place within their neighborhood consistently resulted in higher levels of procedural justice (Schuck & Martin, 2013).

The consequence of emotional reactions in response to procedural justice (or lack of) and the effect they have on citizen behavior may be worth considering toward the advancement of procedural justice research (Murphy & Tyler, 2008). Barkworth and Murphy (2015) examined the role of negative affect on citizen compliance behaviors during police-citizen interactions. Their study found that procedural justice was linked to a propensity to comply with police (Barkworth & Murphy, 2015).

Recent studies suggest that previous opinions brought into a police-citizen interaction are important determinants of assessments of police fairness (Braga, Winship, Tyler, Fagan, & Meares, 2014). This notion indicates that police can impact citizen perceptions of police actions by enhancing the overall climate of police-citizen relationships in general (Braga et al., 2014).

Some procedural justice studies suggest that collective efficacy may play a role in the relationship between procedural justice and police legitimacy. Nix and colleagues (2015) used Tyler's (2004) process-based model to study whether individual perceptions of collective efficacy serve as a social-psychological cognitive orientation influencing police trust. They found that procedural justice is important in convening public trust but that citizens' cognitive orientation toward their community at the neighborhood level may be more significant in shaping their trustworthiness of the police (Nix et al., 2015).

Studying Procedural Justice

Procedural justice is instructive not only due to the importance of maximizing fairness, but based on the growing body of research that indicates a correlation between police legitimacy

and public compliance with the police and the law (Tyler, 1990, 2004; Tyler & Huo, 2002). Tyler's (2004; 2006; 2009; 2011) research is concerned with procedural justice in police-citizen encounters as the key precursor of police legitimacy. Procedural justice is studied through a social-psychological framework. The study of procedural justice is portrayed through the use of distinct, but related, categories of interpersonal behavior and decision-making strategies known as participation, neutrality, dignity/respect, and trustworthiness which are examined here (Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2004, 2009, 2011).

The first is participation (also known as voice). Decision-making processes are perceived as fair when the individuals involved are afforded the opportunity to describe their position, explain their views, and provide input that is then taken into account when decisions are made regarding the incident in which they are involved. Police officers should encourage citizens to participate in the decision-making process by giving them a voice that is heard and understood (Tyler, 1990, 2004; Tyler & Huo, 2002).

The second is neutrality. Processes are viewed as fair when decisions are made in a neutral, unbiased fashion. Transparency in decision-making presumably encourages evaluations of neutrality. Citizens report viewing a situation as fair when officers are transparent about why they are resolving a situation in a particular way, even when the result is negative or punitive in nature (Tyler, 1990, 2004; Tyler & Huo, 2002).

The third is dignity and respect. When police officers treat citizens with politeness and dignity and acknowledge and respect their rights, evaluations of procedural justice improve (Tyler, 1990, 2004; Tyler & Huo, 2002). Officers should take opportunities to engage in actions that reinforce the rights afforded to citizens and exhibit professionalism during the encounter, even when respect is not provided to them (Tyler, 1990, 2004; Tyler & Huo, 2002).

The fourth is trustworthiness (also known as trustworthy motives). When citizens trust the intentions of the police and believe that they are genuinely concerned with their well-being and quality of life, police processes are often viewed as fair (Tyler, 1990, 2004; Tyler & Huo, 2002). Trust in the police populates a great deal of the procedural justice literature and extends into its own line of research. Erosion of trust negatively impacts perceptions of fairness within community interactions (Tyler & Huo, 2002).

Levels of procedural justice and evaluations of police legitimacy are typically studied using self-reporting (Hinds & Murphy, 2007; Jonathan-Zamir & Weisburd, 2015; Kochel et al., 2013; Murphy et al., 2008; Reisig et al., 2007; Sunshine & Tyler, 2003; Tyler, 2001, 2004, 2009; Tyler & Huo, 2002; Tyler et al., 2010; Tyler & Wakslak, 2004). Researchers generally utilize questionnaires and telephone or in-person interviews to solicit citizen viewpoints regarding the police interactions in which they have been involved. The advantage of self-reporting is that the citizen's perceptions of fair treatment can be directly accessed. This approach leaves out the views of the police or other people involved in the encounters. Surveys and interviews are based upon the attitudes and perceptions of the citizen and do not provide a platform upon which police behaviors can be examined. Researchers are also limited in their ability to assess the characteristics of the citizen, officer, and situation and the ways in which these factors may relate to citizen behaviors and outcomes.

Direct observation is also used to study procedural justice (Jonathan-Zamir et al., 2013; Mazerolle et al., 2012). The existence of procedural justice studies using direct observation is limited but growing. Use of observation to study police-citizen interactions allows researchers access to the entire encounter from a neutral perspective. In an observational study, researchers observe people in their natural setting, either in person or by using recordings of field

encounters. Data is either quantitative or qualitative, depending on the design. This approach provides a holistic view of each interaction. The limitation of this approach is that citizen perceptions are based upon observations of behavior rather than self-reports. This leaves out the ability to directly access citizen behaviors as it relies upon behavioral cues.

There are several ways in which procedural justice measures are assessed. Procedural justice is generally operationalized using statements based upon Tyler's (2004) four tenets (participation, neutrality, dignity and respect, and trustworthiness). Researchers may choose to validate the data through factor analysis to achieve consistency (Jonathan-Zamir, et al., 2013). In order to reach a conclusion regarding an overall level of procedural justice within a study, researchers may also choose to combine these constructs into an overall procedural justice scale (Hinds & Murphy, 2007; Jonathan-Zamir & Weisburd, 2015; Kochel et al., 2013; Murphy et al., 2008). Some studies opt to examine certain procedurally just behaviors rather than all four pillars (Jonathan-Zamir et al., 2013). The operationalization of each element tends to vary by study and there are few studies using the all four pillars in a similar design, which limits comparison within the research (Jonathan-Zamir et al., 2013).

Mazerolle and colleagues (2012) and Jonathan-Zamir and colleagues (2013) used comprehensive procedural justice measures that incorporated Tyler's (2004) four elements. These studies used the four individual measures to construct indices for each of the four pillars as well as an aggregate procedural justice scale that was designed to indicate the behaviors that are most likely to increase police legitimacy (Mazerolle et al., 2012; Jonathan-Zamir et al., 2013). In several studies, the individual procedural justice measures as well as the overall scale have been used to develop qualitative studies based on in-depth interviews with citizens who have interacted with the police (Brunson & Miller, 2006; Carr, et al., 2007; Elliot, Thomas, & Ogloff,

2013; Gau & Brunson, 2010; Miller & Hefner, 2013; Stoutland, 2001). This approach would address the main limitation of each type of design.

Critiques

Research consistently finds that if authorities use procedural justice in encounters with the public then citizen cooperation and compliance with the law increase (Reisig, et al., 2007; Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2001, 2004, 2009, 2011; Tyler & Fagan, 2008; Tyler et al., 2010). While procedural justice theory has facilitated the development of a process-based model in policing (Tyler, 2004), a debate exists within the policing literature regarding procedural justice as a predictor of citizen compliance. Critics suggest that the connection between procedural justice behaviors and citizen outcomes (i.e. enhanced compliance with the law) used to advance the theory, fail to account for other varying factors that exist in police-citizen interactions (Avakame, et al., 1999). There are a number of existing factors such as race, gender, socioeconomic status, collective efficacy, and emotional well-being that may require further research. Gau (2015) also suggests that procedural justice studies do not adequately consider legal cynicism as a predictor of noncompliance. Gau (2015) indicates that procedural justice reduces cynicism, which contributes to increases police legitimacy.

Some research suggests that procedural justice as an indicator of police legitimacy and legal compliance fails to account for the authoritative nature of police. Harkin (2015) contends that the nature of authority produces legitimacy as well as being a product of it. It is also suggested that the police do not often lose legitimacy, despite undesirable and illegal actions on the part of the police. Harkin (2015) notes that the transient nature of the global population fosters varying levels of legitimacy toward authorities based upon experiences in different cities, states, and countries.

Concerns have emerged regarding the ways in which procedural justice is measured. There is some divergence in key constructs and methodology due to the complexity of these interactions (Jonathan-Zamir, et al., 2013). Some researchers suggest that this gap can be addressed through systematic social observation of police-citizen interactions followed by qualitative analyses of citizen and police perceptions (Jonathan-Zamir, et al., 2013).

Dai and colleagues (2011) used systematic social observation to examine whether procedurally just behaviors affect citizen disrespect toward the police and citizen noncompliance with police requests. Their study found limited support for procedural justice factors. While they found that police demeanor and citizen voice were significant in reducing citizen disrespect and noncompliance, they suggested that procedural justice has a limited and inconsistent impact on citizen behavior (Dai, et al., 2011).

Recent events impacting police-citizen relationships have led police agencies to consider new ways that can build trust, confidence, and satisfaction within the communities that they serve. Current shifts in organizational objectives and strategies provide a platform upon which positive change can emerge. As agencies embrace this challenge, the concept of procedural justice as a means of attaining police legitimacy has resurfaced as the way in which these goals are best achieved. The policing literature links legitimacy to enhanced trust, respect, and compliance (National Research Council, 2004; PERF, 2014; Tyler, 2004, 2009, 2011; Tyler & Jackson, 2012). At the officer level, police agencies can use this connection to shape behaviors in their encounters in the field. Organizationally, agencies can build trust and bolster cooperation with police investigations. As an industry, heightened police-citizen relations positively impact the view of the law enforcement mission and functionality within its role.

Public perceptions of legitimate police behavior are generally based upon personal experiences and highly publicized law enforcement matters (Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004). The way that officers treat people and the behavior that they observe in police-citizen encounters are the two major factors in determining their opinions (Tooley, 2015). These factors signify the tenets of procedural justice within police-citizen encounters. Procedural justice in law enforcement is generally depicted through the use of Tyler's (2004) four pillars: participation, neutrality, dignity and respect, and trustworthiness. When officers display these behaviors, citizens generally respond favorably, even when there are negative consequences to their actions. A favorable response to a law enforcement encounter, coupled with an opportunity to build positive ties with a community member, becomes a building block to improve relations in the long term.

Current Study

If the objective is to enhance police-citizen encounters toward the ultimate goal of improving relations, understanding the current state of procedural justice within an agency is instructive. The study of procedural justice generally occurs in one of two designs. The first is to survey citizens regarding their perceptions of encounters with the police. This format provides an avenue for citizens to self-report their feelings regarding the way that they were treated when engaged by the police. The second, less common approach is for researchers to observe officers in the field and assess the ways in which they engage the public. This method involves an uninvolved third party (the researcher) who evaluates the behaviors of officers and citizens as well as the outcome of the incident. Both research designs accomplish a similar goal through the use of traditional procedural justice measures. The observational design is emerging

as a robust method for assessing officer behavior and its link to citizen perceptions and outcomes.

The extant study utilized data collected through systematic social observations of police-citizen contacts in the field. The use of direct observation to assess procedural justice in police-citizen encounters is extremely limited in the existing literature. This study replicates a design created by Jonathan-Zamir and colleagues (2013) in their study measuring procedural justice in police-citizen contacts. Their protocols, based upon earlier studies, capture police behaviors that presumably encourage citizen feelings of fairness (Jonathan-Zamir et al., 2013).

An explanatory design was utilized to study the relationship between officer and citizen behaviors. This study is guided by the following research questions.

1. How do officers exercise different levels of procedural justice?
2. How do characteristics of the situation, the officer, and the citizens influence the type of treatment citizens receive?
3. What effect do officers' procedurally just behaviors have on citizen behaviors toward police?

This study utilizes findings from the literature, which provide support for the following hypotheses.

H1: Officers exercise procedurally just behaviors consistently among all incident characteristics.

H2: Officers exercise procedurally just behaviors consistently among all citizen characteristics.

H3: Officers exercise procedurally just behaviors consistently among all officer characteristics.

H4: When officers employ procedurally just behaviors, citizen behaviors toward police are more likely to be positive.

Chapter 3: Research Methods

The purpose of this study is to determine the role of procedural justice behaviors within police-citizen interactions, specifically related to citizen behaviors. It is important to assess the actions of police officers as they interact with citizens during the course of their duties.

Examining the actions of the police within contacts with community members should provide useful information to assist in designing formal and informal training programs. The goal of this research includes assessing procedural justice within a police agency through officers' self-reported perceptions as well as observed behaviors of the officers during their interactions with members of the public in order to better understand the impact of certain actions on citizen behaviors and outcomes.

In this chapter, a concurrent nested mixed methods design will be defined and justified as an appropriate methodological approach. The participants and study site will be outlined followed by a detailed description of the methodological design. The data collection process using surveys and observations will conclude the chapter.

To better understand procedural justice within police-citizen interactions, the researcher will answer the following research questions.

1. How do officers exercise different levels of procedural justice?
2. How do characteristics of the situation, the officer, and the citizens influence the type of treatment citizens receive?
3. What effect do officers' procedurally just behaviors have on citizen behaviors?

The study addresses the following hypotheses:

- H1. Officers exercise procedurally just behaviors consistently among all incident characteristics.
- H2. Officers exercise procedurally just behaviors consistently among all citizen characteristics.

H3. Officers exercise procedurally just behaviors consistently among all officer characteristics.

H4. When officers employ procedurally just behaviors, citizen behaviors toward police are more likely to be positive.

There is limited information available in the literature on assessments of procedural justice in police-citizen interactions through observation. This study employs a perception survey and systematic social observation to better understand procedural justice and its impact on citizen behaviors.

Subject Selection

Participants in this study included sworn officers assigned to a uniformed, patrol capacity. The researcher was most interested in assessing officers who routinely responded to calls for service and engaged in proactive law enforcement activities. These officers were most likely to be equipped with BWCs on a regular basis.

Survey Respondents

The target population in the survey phase of the study was the sworn officers who were employed by the Virginia Commonwealth University Police Department (VCUPD) at the rank of sergeant and below in July 2015 (n=58). The survey was deployed to officers who had the potential to be equipped with BWCs during their assignment. Officers at the rank of lieutenant and above were not included in this sample because they were not equipped with BWCs. The reason for this exclusion is that they would not be a part of the observation data collection since they would not be assessed in the footage. The researcher sought to ensure that the survey respondents were aligned with the observation participants to avoid skewing the results. Fifty-eight officers were surveyed and 58 surveys were completed, resulting in a 100 percent response rate. The census characteristics, as gathered from the survey questionnaire, are reported in Table 2.

As indicated in Table 2, those completing the survey consist of officers (86%) and sergeants (14%). The majority was male (76%) with most having completed 0-5 years of law enforcement service (26%). Age was closely dispersed between 21-29 (17%), 30-39 (21%), and 40-49 (15%) years. There were slightly more white officers (59%) than non-white (41%).

Table 2: Demographics of survey respondents

Variable	N	%
Age		
21-29	17	29%
30-39	21	36%
40-49	15	26%
50 or older	5	9%
Gender		
Female	14	24%
Male	44	76%
Race/Ethnicity		
White	34	59%
Nonwhite	24	41%
Current rank		
Officer	50	86%
Sergeant	8	13%
Years of service		
0-5 years	26	45%
6-10 years	16	27%
11-19 years	14	24%
20 or more years	2	3%

Observation Participants

The target population in the observation data collection involved BWC videos (n=500). Uniformed officers equipped with BWCs during their shift captured observation data through their BWC equipment. In July 2015, there were 58 eligible officers employed at VCUPD but that number fluctuated slightly over the eight months that observation data were collected.

As illustrated in Table 3, most videos involved male officers (84%). Just over half involved officers with 0-5 years of service (51%). The majority of videos involved officers who were either 21-29 (41%) or 30-39 (41%) years of age. White officers were observed in the majority of videos (66%).

Table 3: Demographics of officer participants

Variable	N	%
Age		
21-29	204	41%
30-39	204	41%
40-49	85	17%
50 or older	7	1%
Gender		
Female	76	16%
Male	421	84%
Race/Ethnicity		
White	332	66%
Nonwhite	168	34%
Years of service		
0-5 years	254	51%
6-10 years	192	38%
11-19 years	46	9%
20 or more years	8	2%

Also part of the target population in the observation data involved citizens who interacted with VCUPD officers as part of the police-citizen encounter. As shown in Table 4, citizens who interacted with officers consisted of mostly males (64%). Most citizens were aged between 21 and 29 years (43%). Over half of the citizen participants were nonwhite (62%).

Table 4: Demographics of citizen participants

Variable	N	%
Age¹		
20 or under	86	17%
21-29	216	43%
30-39	56	11%
40-49	62	12%
50 or older	76	15%
Gender		
Female	180	36%
Male	320	64%
Race/Ethnicity²		
White	188	38%
Nonwhite	312	62%

Study Site

VCUPD was selected as the site for this study. There were several reasons for this selection. Primarily, VCUPD is one of the only agencies in the region that has a fully implemented BWC program. To a lesser extent, the researcher is positioned at VCU as a graduate student and interested in policing practices as a constituent of the agency.

VCUPD is a mid-sized police department comprised of 88 sworn officers, approximately 250 non-sworn security personnel, and operates its own emergency communications center and training academy. VCUPD is currently the largest campus police agency in Virginia and one of the largest in the nation. Table 5 depicts the demographics of the agency's entire sworn force, which is predominantly male (69%), white (53%) and assigned the rank of officer (68%).

¹ Age represents the number that was verbalized during the interaction. In limited cases when citizen age was not verbalized, the researcher estimated the citizen's age using a range.

² Race/ethnicity represents an assessment made by the researcher by observing citizens on camera. In most cases, the citizen and/or officer did not verbally confirm race/ethnicity.

Table 5: Study site officer demographics

Variable	N	%
Gender		
Female	19	22%
Male	69	78%
Race/Ethnicity		
White	53	60%
Nonwhite	35	40%
Rank		
Officer	68	77%
Sergeant	11	13%
Lieutenant	4	5%
Captain or above	5	6%

VCUPD polices a large, diverse, urban university campus in the center of Virginia’s capital city. Richmond is the fourth most populous city in Virginia with a population of 214,114 citizens—the metropolitan statistical area (regional population) is approximately 1.3 million. VCU is located in downtown Richmond, enrolling roughly 33,000 students and employing over 20,000 faculty and staff members, all of whom are served by the VCUPD. Covering 144 acres of downtown Richmond, VCUPD maintains concurrent jurisdiction with the Richmond Police Department and polices many of the same residents, businesses, and visitors that travel to or through VCU’s jurisdiction on a daily basis.

The mission of the VCUPD is to provide a safe and secure environment for the students, faculty, staff and visitors of VCU (VCUPD, 2016). This is accomplished through the development of various community-based crime prevention strategies and initiatives in conjunction with traditional law enforcement and community policing practices. VCU employs 22,000 people and is the largest employer in Richmond. VCUPD officers have full authority to enforce state and federal laws and city ordinances within their jurisdiction.

VCUPD operates its own training program. The agency has an on-site training academy for pre-service and in-service training requirements for sworn officers. A review of the pre-service and annual re-training curriculums was conducted in order to identify courses that could contribute to officers' overall understanding of procedural justice concepts. There were no courses specifically entitled or focused on procedural justice as a model for officer behavior. Officers may be obliquely prepared to exhibit procedural justice constructs through courses on related topics such as professionalism, community policing, policy and procedure, and courtesy. These courses and descriptions of procedural justice content contained in the curriculum are found in Table 6.

Table 6: VCUPD training courses with procedural justice content

Training Course	Objectives
Officer Professionalism	Maintain a courteous relationship with the public to foster a positive community relationship
Oral Communication	Develop speaking skills to use in interactions with the community and legal proceedings
Community Policing	Relationship building between law enforcement and the community
Cultural Diversity	Understanding similarities and differences between varying cultures
Basic Legal Concepts/ Law of Arrest/ Constitutional Law	Expectations of police officers when acting in a law enforcement capacity
Traffic Stops	Facilitating law enforcement contacts during traffic enforcement encounters

The concept of procedural justice recently reemerged at VCUPD when the Obama administration convened the President's Task Force on 21st Century Policing. The President's Task Force on 21st Century Policing, a group of scholars, community members, and law enforcement practitioners, released a task force report and accompanying implementation guide in 2015 and implored agencies to take into consideration a number of recommendations. The

recommendations were based upon six defined pillars (building trust and legitimacy, policy and oversight, technology and social media, community policing, training and education, and officer wellness and safety) designed toward the goal of improving the relationship between the police and American communities amid 21st century challenges (President's 21st Century Task Force Report, 2015). Pillar one (building trust and legitimacy) states, "law enforcement agencies should adopt procedural justice as the guiding principle for internal and external policies and practices to guide their interactions with rank and file officers and with the citizens they serve" (President's 21st Century Task Force Report, 2015, p. 1). This began the re-emergence of the concept of procedural justice by name among police practitioners. Like many agencies nationwide, VCUPD developed a strategic plan to address the task force recommendations suggested in the final report.

Access

This study was developed based upon access to an existing data source due to the researcher's relationship with the agency. Gaining access to this study site required permission from VCUPD's chief of police. The researcher approached the chief of police with the research idea and was given permission to conduct the study. The chief was given the opportunity to review and approve the questionnaire as well as the survey process. The chief also reviewed and approved the instrument that was used in the observation phase.

Study Design

To explore the research questions for this study, a concurrent nested mixed methods design was developed. Mixed methods research uses multiple ways to explore a research problem and is widely accepted as researchers use this approach to study different perspectives and overcome some limitations that exist within a single design (Creswell & Plano Clark, 2011).

Concurrent Nested Mixed Methods Design

This explanatory study uses a mixed methods design to address questions regarding interactions between the police and community members. The study employs a modified replication of the design created by Jonathan-Zamir and colleagues (2013). They created and validated instruments to assess each of the four pillars of procedural justice (participation, neutrality, dignity/respect, and trustworthiness). This study examined the impact of procedural justice on citizen behaviors through a new mode of observation: body worn cameras.

Explanatory research. Explanatory research is a methodological approach that is predominantly concerned with explaining what is happening. Explanatory research attempts to connect ideas to explain cause and effect (Frankfort-Nachmias & Nachmias, 2008). In this perspective, explanatory research looks at how things come together and interact (Frankfort-Nachmias & Nachmias, 2008). The design will compare two distinct methods to address the hypotheses and better understand the findings.

In quantitative research, the researcher relies on numerical data and develops claims for cause and effect thinking (Creswell & Plano Clark, 2011). The researcher reduces variables, develops questions and hypotheses, uses observation and measurement, and tests theories (Creswell & Plano Clark, 2011). The researcher isolates variables to determine the degree and frequency of relationships and determines the variables that warrant investigation to construct instruments designed to produce highly reliable and valid scores (Frankfort-Nachmias & Nachmias, 2008).

Mixed methods. This study will connect findings from two distinct methods. The study began with a questionnaire, which surveyed officers on perceptions and attitudes toward procedural justice constructs. The survey phase instructed the researcher on the current state of

procedural justice from the officers' perspective. Results from the survey did not influence observation data collection.

Systematic social observation. The most basic method of understanding behavior utilizes observational studies (Taylor, 1994). Observational studies involve a researcher identifying variables that are associated with one another (Drew, Hardman & Hosp, 2008). In an observational study the researcher chooses what to observe and interprets observations (Drew et al., 2008). Some of the foundations of modern scientific thought are based on observational research (Taylor, 1994). In observational studies, researchers collect data and make comparisons by observing subjects and measuring variables of interest without assigning treatments to the subjects. Measurements take place with imposing as little influence on the subjects as possible. The individuals often do not know that they are being observed for research purposes (Taylor, 1994). The intent of observational studies is to monitor the effects of treatments on the individuals by not imposing any form of intervention. The subjects are disturbed as little as possible during the data collection (Drew et al., 2008; Taylor, 1994).

Observations of human behavior have been instructive since the inception of research (Mastrofski et al., 2010). Albert Reiss introduced the concept of systematic social observation (SSO) within criminology in the 1960s (Mastrofski et al., 2010) when he demonstrated how SSO could answer important research questions about variables that influence police-citizen interactions and policies related to race relations, justice, and crime control (Mastrofski et al., 2010). SSO is related to ethnography but it is a covert approach.

SSO, when conducted covertly, allows researchers to examine uninterrupted human behavior, which is extremely useful in measurement. When people do not know that a third party is observing them, they behave more organically. This is the value of covert observation.

Police-citizen interactions were observed in their natural setting. Officers were assessed during their work through the use of an observation instrument containing procedural justice, situational, and demographic variables. The researcher assessed police-citizen interactions during routine and emergency calls for service and proactive police initiatives.

The study employs the use of nonparticipant observation data. Nonparticipant collection methods are used in research where the researcher seeks to enter a social system to observe events, activities, and interactions with the goal of gaining a direct understanding of a phenomenon in its natural context (Caldwell & Atwal, 2005; Creswell & Clark, 2011). As a nonparticipant, the researcher does not participate in the activities being observed. Nonparticipant observation has played an extensive role in social science research (Caldwell & Atwal, 2005; Creswell & Plano Clark, 2011). It is distinguished from participant observation by the researcher's lack of involvement in the research setting with the observer assuming a disconnected and independent role. The researcher generally has little to no contact with the research subjects and views or records events through one-way mirrors or video camera footage (Caldwell & Atwal, 2005).

Nonparticipant observation is either overt or covert (Caldwell & Atwal, 2005; Creswell & Plano Clark, 2011). This research was conducted covertly. When overt, participants understand that the observer is there for research purposes and present during organizational activities. When covert, participants are not aware of the presence of the observer (Caldwell & Atwal, 2005). This research conducted reviews of footage that was obtained for law enforcement purposes and used secondarily for research goals. The participants were engaged in the performance of their duties with full knowledge that department members could review their actions.

Connection of Survey Data and Observation Data

The researcher sought to better understand the ways in which officers' perceptions of procedural justice measures impact the actualization of procedural justice behaviors in the field. These results did not inform the development of the SSO instrument that was based upon pre-determined constructs from an existing study. The intent of the survey data was to provide the researcher with an understanding of officer perceptions when considering the SSO results. Survey data, when compared with the observation data, connects attitudes toward procedural justice with their behaviors in the field. This integration can be instructive in better understanding citizen responses to officers' approach to procedural justice.

Design Strengths and Weaknesses

The strengths and weaknesses of mixed methods designs have been widely discussed in the literature (Creswell & Plano Clark, 2011; Frankfort-Nachmias & Nachmias, 2008). There are several advantages to utilizing this particular design. Explanatory research is conducted to better understand a phenomenon. This type of research can be used for hypothesis testing and allows for inferences to be made regarding associations and causality (Frankfort-Nachmias & Nachmias, 2008).

The observation data collected within this study were converted from qualitative to quantitative. Qualitative studies are useful because they generate data that can provide in depth insight into a question or topic. There are several advantages to converting qualitative data and presenting it in a scientific construct within SSO (Mastrofski, et al., 2009). Quantitative research assists in answering questions such as "how and why" and "to what degree and under what circumstances" in certain types of research. This can assist policy makers by informing the decision-making process (Creswell, 2011; Frankfort-Nachmias & Nachmias, 2008).

The use of BWC footage as a mechanism for observing officers in the field is a new endeavor and could offer a reduction in the Hawthorne effect associated with observation studies. This research suggests that BWC recordings can serve as a proxy for physical observations of officers in the field that could be impacted by the Hawthorne effect. The Hawthorne effect, which is also known as the observer effect, is the reactivity whereby individuals whose actions are being observed, modify or improve behavior due to the consciousness of being watched. The Hawthorne effect suggests that results from an observational study could be atypical due to participants' awareness of the observer. This notion suggests that temporary increases in productivity or positive behaviors by participants are based on an awareness of being researched.

There are several disadvantages of this particular design. Quantitative results from observations may not be as rich as those derived from a qualitative design (Frankfort-Nachmias & Nachmias, 2008). SSO quantifies qualitative observational data by scoring them to create a quantitative data set. This technique generates some criticisms from qualitative researchers. Converting qualitative data invariably loses some of the richness of the narrative by reducing data into single constructs. The quantitative design also limits a deeper understanding of officer and citizen perceptions.

This approach also leaves unexplored other useful viewpoints such as those of citizens or third parties. While officer perceptions were gauged through a survey, the questionnaire is designed with close-ended questions that do not provide the opportunity to elaborate on concepts. The observation phase did not address citizen perceptions of officer behaviors but rather assessed observed citizen behaviors during the encounter. As such, the researcher does not

have any knowledge of the citizen other than what was observed directly. The researcher has very little context from which to draw attitudinal conclusions.

The researcher's familiarity with the BWC data and VCUPD's uniformed officers can present a potential for bias. The researcher is acquainted with all of the officers that were assessed. The researcher acknowledged this potential for bias and conducted an inter-observer reliability evaluation to better understand where the researcher's assessments aligned with observations of the same incidents assessed by non-researchers of varying age, gender, and race.

This study required feasibility of resources to collect and analyze both sets of quantitative data. This study was time-consuming. The survey phase did not require a great deal of time to deploy since it employed a web-based questionnaire with automated results. The observation data collection phase was extensive. Five hundred police-citizen interactions of varying type and length were assessed to capture all officers within the population and each incident type several times. This variation yielded a robust depiction of the overall population.

The agency examined in this study is a mid-sized law enforcement agency in Richmond, Virginia. The agency is also a campus police agency with a dual purpose – to police within its urban jurisdiction and to provide services to its specific constituents within the university community. The study therefore addresses only one agency in one city, and as a result, the findings and conclusions are not generalizable to other agencies of differing size and scope within the law enforcement community.

Officer Perception Survey Data

Survey data were collected to gain quantitative metrics of procedural justice perceptions at the police officer level for analysis. Measuring motivations of human behavior can be

difficult, but this research minimized complexities by adapting a pretested and previously used survey instrument, providing a degree of reliability and validity.

Procedural justice perceptions were identified through a series of officer responses to a survey instrument (Appendix A). The response categories used for each 5-point Likert scale were strongly agree, agree, neutral, disagree, and strongly disagree. Appendix A outlines the content of the survey instrument. The survey adopted the procedural justice measures (i.e. participation, neutrality, dignity/respect, and trustworthiness) utilized by Jonathan-Zamir and colleagues (2013). The researcher believes that procedural justice techniques may lead to higher levels of positive citizen behaviors in police-citizen encounters.

Survey Data Collection

The researcher deployed the survey through electronic mail to all eligible participants. Due to the success of the web-based technique in previous studies, the researcher expected a high response rate. Access to the web-based survey was sent to the officers' email. The survey provided informed consent, described the nature of the survey and its anonymity, and shared the incentive of an executive summary of results for completing the survey. If participants agreed with the terms, they progressed to the survey. A final page thanked the participants and reminded them that the results would be anonymous. Reminder emails with access to the web-based survey were sent two weeks after dissemination.

A self-administered survey was most appropriate for this research, as this format assists in limiting social desirability bias. Social desirability bias depicts the tendency of survey participants to respond to survey questions in a manner that they perceive will be viewed favorably by the researcher (Groves, Fowler, Couper, Lepowski, Singer, Tourangeau, 2009). Social desirability bias can take the form of over-reporting behaviors that the respondent views

as positive or under-reporting behaviors that may appear undesirable (Groves et al., 2009). The officer would not have to admit directly to the researcher a socially undesirable or negatively valued characteristic or behavior. The researcher attempted to limit social desirability by minimizing a sense of judgment, using self-administered data collection procedures, and assuring anonymity (Groves et al., 2009). Groves and colleagues (2009) suggest that web-based surveys potentially reduce social desirability effects because respondents are able to backtrack to review or change previous answers. For the purposes of this research, an officer may not have wanted to admit that he or she had not implemented any procedural justice practices for socially undesirable reasons, such as laziness, not caring about the public, or lack of conceptual understanding.

A self-administered procedure allows more time for thought before responding and therefore allows the officer to research any terms that are unfamiliar. The officer also had time to contact the researcher for further clarification, as the researcher's contact information was provided. Since there were some potentially sensitive answers important to the focus of the survey, the self-administered survey likely improved estimates.

Measures

Independent Variables. Jonathan-Zamir and colleagues (2013) created protocols based upon earlier studies that captured police behaviors that presumably encourage citizen feelings of fairness. They used this protocol to develop scales for each of the four components of procedural justice (citizens desire the opportunity to explain their situation, react positively to evidence that the authorities with whom they are dealing are neutral, are sensitive to whether they are treated with dignity and respect, and focus on cues that communicate trustworthiness)

(Jonathan-Zamir et al., 2013). These procedural justice scales, and the items that were combined to create them, formed the basis for this study.

Procedural justice was addressed through a series of officer responses to a survey instrument. The response categories used for each 5-point Likert scale were strongly agree, agree, neutral, disagree, and strongly disagree (Creswell & Plano Clark, 2011). Appendix A outlines the content of the survey instrument.

The four pillars of procedural justice were addressed through the questions listed in Appendix A. Respondents were asked to report their level of agreement with four statements about procedural justice (i.e. “the department requires me to encourage citizens to tell their side of the story,” “I have been well trained to interact with citizens in a fair and respectful manner,” “my supervisors view accusations of police discrimination against citizens very seriously,” and “my department is not concerned with whether officers comfort and reassure citizens who are distressed”). Responses ranged from “0 = Strongly Disagree” to “5 = Strongly Agree.” Higher scores represented a stronger perception of informal procedural justice.

Dependent variables. Demographic variables included rank, length of service, age, race, and gender.

Coding

All items were coded as indicated in Appendix I. The measures describe the officer and his/her procedural approach toward the citizen.

Systematic Social Observation Data

Recorded contacts captured through BWC footage were assessed according to the use of procedural justice behaviors exhibited during police-citizen interactions. The methodology utilizes data collected through the existing BWC program at the VCUPD. The research design

allows for comparisons between variables and connection with the officer perception survey data.

SSO Data Collection

The target population was the footage depicting VCUPD uniformed, BWC-equipped officers. Also within the target population were citizens who interact with VCUPD officers as the officers conduct their interactions in the field. Sworn officers equipped with body worn cameras during their shift captured observation data based on pre-tested procedural justice measures (i.e. participation, neutrality, dignity/respect, and trustworthiness).

Mode of Observation: Body Worn Camera Programs

To understand how procedurally just behaviors may be assessed in recordings by body worn cameras, a brief discussion of the existence of this recently emergent technology is warranted. Over the past few years BWC programs have received significant attention. Evidence indicates that agencies implementing BWC programs may demonstrate high levels of transparency, a reduction in complaints and officer use of force rates, increased levels of trust among police, and enhanced communication with citizens (White, 2014). BWC programs may provide a platform upon which police-citizen relations and perceptions of fairness and equitable treatment can be rebuilt. This is particularly important among heterogeneous communities given the disproportional frequency of interactions between the police and minorities, especially in urban settings.

Implementation of BWC programs is in the early stages but it is growing. Equipping police officers with BWCs has become a mechanism for departments to enhance public safety and improve police-citizen relations (Vorndran, Burke, Chavez, Fraser, & Moore, 2014). According to the American Civil Liberties Union (ACLU) (2013). BWC programs are

considered a best practice among law enforcement agencies. The ACLU (2013) suggests that the use of BWCs may curtail the abuse of police powers and protect officers from false accusations of unsanctioned or illegal actions. Law enforcement leaders assert that a key aspect of BWC programs is their ability to proactively impact police-citizen relations. The federal government advocates that the stability of American communities is contingent upon fair and equitable delivery of police services as well as improving the integrity of the criminal justice system overall (White House Factsheet: Strengthening Community Policing, 2014). The Department of Justice (DOJ) recently awarded over \$250 million to police agencies to purchase BWCs, expand training, provide resources toward enhancing transparency, and increase federal oversight within local law enforcement agencies (White House Factsheet: Strengthening Community Policing, 2014).

BWC programs are widespread within law enforcement (Lum, Koper, Merola, Scherer, & Reioux, 2015; White, 2014). Agencies nationwide have adopted BWC programs to accomplish several procedural objectives. BWCs provide a framework for accurate documentation of police-citizen contacts, arrest, and critical incidents. Audio and video recordings may enhance the department's ability to review probable cause for arrest, officer and suspect interaction, and evidence for investigative and prosecutorial purposes. They may serve to improve the accuracy of officer reports and testimony in court. BWC footage may also be useful in documenting crime and accident scenes or other events that include the confiscation and documentation of evidence or contraband. BWC footage may provide additional information for officer evaluation and training. The footage may also be helpful in enhancing the department's levels of professionalism, customer service, and community policing objectives (Clark, 2013).

Early research indicates that BWC use within law enforcement organizations may be related to decreases in citizen complaints and officer use of force incidents (COPS & PERF, 2014; President's 21st Century Task Force Report, 2015; White, 2014). There is little evidence offered to support or refute these claims due to the infancy of these programs and there are several questions that still remain regarding deploying the technology as well as managing content (Lum, et al., 2015; White, 2014).

While BWC programs offer potential as a tool within law enforcement, the potential advantages and disadvantages to the utilization of the equipment are largely anecdotal or unknown (COPS & PERF, 2014). Most claims remain untested by independent researchers and even existing studies could benefit from further empirical research (COPS & PERF, 2014; White, 2014). Research examining implementation and impact of the existence of cameras including the potential civilizing effect, citizen perceptions, evidentiary benefits, privacy implications, and impact of citizen perceptions of police legitimacy is necessary (COPS & PERF, 2014; White, 2014).

BWC usage at VCUPD. VCUPD is one of the first agencies in the Richmond metropolitan area to fully deploy a body worn camera program. In 2015, all uniformed officers were required to wear a BWC during their shift and deploy it according to internal policy. BWC equipment provides an unbiased audio/video recording of events that employees encounter. These recordings are utilized for the documentation of evidence, preparation of offense reports, and future court testimony. The recordings can also be used during allegations of misconduct and when debriefing use of force incidents or evaluating performance. Officers are governed by internal policy regarding the use of BWC equipment. Officers who deviate from the guidelines set forth within the policy are subject to disciplinary action.

Officers are instructed to activate their BWC to record all contacts with citizens in the performance of law enforcement duties. Officers may exercise discretion in activating their camera during non-law enforcement contacts such as those related to providing basic assistance to citizens and engaging in crime prevention events. Should an officer be unsure as to whether or not they should activate the BWC, the officer is instructed to err on the side of recording. The BWC must remain activated until the event is completed in order to ensure the integrity of the recording. If an officer fails to activate the BWC, fails to record the entire contact, or interrupts the recording, the officer is instructed to document the reasons that a recording was not made, was interrupted, or was terminated.

VCUPD implemented the BWC program all at one time as opposed to many agencies that integrate the equipment incrementally. Once the equipment arrived on-site, uniformed officers began training with the cameras and within one month, the program was active. Internal policy and protocols were developed prior to the arrival of the cameras and officers were trained on their responsibilities prior to using their cameras for the first time. Policy development has undergone rigorous review and enhancement since the inception of the program due to international accreditation standards, legal requirements, and emerging best practices.

Sampling

Not all BWC videos were assessed in this study. The videos selected were a subset of all interactions. There were several types of footage that were assessed. Officers have a low threshold of discretion when choosing to activate their interactions. Internal VCUPD policy requires that all interactions of a law enforcement nature be recorded. These interactions include calls for service, police-initiated encounters, and other types of proactive police activity. Within the BWC system, recordings are labeled as either “evidentiary” or “non-evidentiary.”

Evidentiary recordings are those that included incidents that involve a custodial arrest and are therefore likely to be used in court proceedings. Non-evidentiary recordings are those that included encounters that do not involve a physical arrest but do depict law enforcement matters (i.e. traffic stop, nuisance violations, and field interviews). Both types of footage were used in this study. There was no preference as to type of footage that was selected for assessment. The type of each incident was indicated within the observation instrument.

The researcher examined BWC footage through systematic assignment. Preserved footage from each police-citizen contact was stored in order of occurrence. The researcher began at a random starting point and selected every third contact for assessment.

Recordings of encounters that did not require preservation according to internal policy (i.e. non-law enforcement assistance to citizens and merchant checks) and accidental recordings were not assessed. Footage spanning less than one minute was not assessed. Footage containing technological issues (i.e. inaudible speech or restricted viewpoint) was not assessed.

Other sampling approaches were considered. Given that officers interact with citizens for a number of reasons, a sampling approach based on the nature of the problem (i.e. traffic stop, criminal incident, or citizen assist) was considered. There was a limited variation of calls received by VCUPD due to its jurisdiction. The researcher was interested in this variable but had concerns about limiting the sample by a potential lack of variation.

Sampling according to the outcome of the incident (i.e. arrest, field interview, or assist only) was also considered but it was determined that the proposed number of observations would yield a suitable variation of each outcome.

Measures

Selected constructs, which contribute to the officer's overall approach and/or impact citizen behaviors, are reflected in the items within the protocol. These are broken into the four pillars of procedural justice: participation, neutrality, dignity/respect, and trustworthiness. The characteristics of each situation, the officer, and citizen and the ways that they influence the type of treatment citizens receive were a focus of the data collection. The observation instrument can be found in Appendix C.

Variables

The following variables used in the observation data were treated as independent and dependent according to each model within analysis.

Participation. Decision-making processes are perceived as fair when the individuals involved are afforded the opportunity to describe their position, explain their views, and provide input that is then taken into account when decisions are made regarding the incident in which they are involved. Police officers should encourage citizens to participate in the decision-making process by giving them a voice that is heard and understood (Tyler, 1990, 2004; Tyler & Huo, 2002).

In the literature, participation within police-citizen encounters is generally drawn from two measures: initiator of the event and decision-making during the encounter (Jonathan-Zamir et al., 2013). The initiator of the encounter is concerned with whether it was based upon a call for service to the department through the emergency communications center or whether the police officer initiated the contact. Decision-making is based upon the choices that are made by the officer while interacting with the citizens during the course of the encounter. This study focused on the decisions that were made by the officer that related to participation.

To assess the extent to which officers encourage citizen participation in the interaction, the researcher answered several questions after reviewing each incident. The behaviors exhibited by the officer related to participation indicate whether the citizen was given the opportunity to have their voice be heard relative to the direction of the interaction. Participation within police-citizen encounters (n=500) occurred in 82 percent of interactions where the officer asked the citizen(s) to provide information and a viewpoint. Just over 80 percent of interactions involved citizens who provided their viewpoint and in 78.8 percent of the interactions, officers were actively engaged in listening to the information provided by the citizen. Table 7 depicts the frequency of each participation item within the observation instrument.

Neutrality. Processes are viewed as fair when decisions are made in a neutral, unbiased fashion. Citizens report viewing a situation as fair when officers are transparent about why they are resolving a situation in a particular way, even when the result is negative or punitive in nature (Tyler, 1990, 2004; Tyler & Huo, 2002). Neutrality in police-citizen encounters is based upon actions that depict objective judgment based upon the rule of law rather than bias or the situational characteristics of the incident. Neutrality can be difficult to gauge. Neutrality is best assessed through actions that indicate fair decision-making and equitable treatment.

Neutrality within police-citizen encounters (n=500) occurred in 68.8 percent of officers indicating to the citizen that they would not make a decision until all information was gathered. In 87.4 percent of the encounters, officers explained the reasons that they had become involved in the encounter and in 89.4 percent of the contacts, officers explained why they chose to resolve the situation in the way that they did. Table 7 depicts the frequency of each neutrality item within the observation instrument.

Dignity and respect. When police officers treat citizens with politeness and dignity and acknowledge and respect their rights, evaluations of procedural justice improve (Tyler, 1990, 2004; Tyler & Huo, 2002). Respect during police-citizen encounters is reflected in actions of civility toward citizens. Respect can be ambiguous so this study focused on politeness as an indicator of respectful treatment. Disrespect was measured by provocative, hostile, and demeaning treatment. This study considered respectful behaviors separately from disrespectful behaviors since the possibility of mixed signals exists. Dignity and respect were therefore measured by focusing on the degree to which respectful and disrespectful behaviors were imposed upon citizens in the encounter. Dignity and respect within police-citizen encounters (n=500) occurred in 99.4 percent of encounters involving officers who showed respectful behaviors. Over 87 percent of the time, officers' respectful behavior was dominant throughout the incident. This is compared with 23.8 percent of encounters where officers exhibited disrespectful behaviors. Table 7 depicts the frequency of each dignity/respect item within the observation instrument.

Trustworthiness. When citizens trust the intentions of the police and believe that they are genuinely concerned with their well-being and quality of life, police processes are often viewed as fair (Tyler, 1990, 2004; Tyler & Huo, 2002). Trustworthiness is based upon actions that lead citizens to believe that they can rely upon police officers to assist. Police officers who exhibit care and concern generally offer services, provide information, express compassion, and take appropriate police action. These behaviors are based heavily upon the nature of the interaction, as not all actions would be applicable within certain encounters. Items within the trustworthiness variable provided the option of a "not-applicable" response, which is informative

when considering the frequencies of these behaviors when they were applicable, but limits the overall trustworthiness score within the model.

In 83.2 percent of encounters (n=500), officers inquired about the citizens' well-being. Officers offered comfort or reassurance to citizens in 89.3 percent of interactions (n=205) that warranted such behavior. Officers promised to exert control or influence on the citizens' behalf in 96.2 percent of applicable interactions (n=105). Officers assured citizens that they would write a report on their behalf in 96.9 percent of relevant interactions (n=129). Officers involved a government or private organization on the citizens' behalf in 96.7 percent of relevant encounters (n=122). Table 7 depicts the frequency of each trustworthiness item within the observation instrument.

A separate index for each of the four procedural justice pillars was developed based upon the items outlined in Table 7. Values for each of the four indices are discussed in Chapter 4.

Table 7: Frequency of the items composing the procedural justice variables

Independent Variables	Values	Frequency	%
Participation			
Officer asked the citizen to provide information/viewpoint	Yes	410	82
Citizen provided information/viewpoint	Yes	402	80.4
Officer expressed interest in viewpoint	Dismissive	14	2.8
	Inattentive	28	5.6
	Passive	64	12.8
	Active	394	78.8
Neutrality			
Officer indicated he would not make a decision about what to do until s/he had gathered all the necessary information	Yes	344	68.8
Officer explained why the police became involved in the situation	Yes	437	87.4
Officer explained why s/he chose to resolve the situation as s/he did	Yes	447	89.4
Dignity/Respect			
Officer showed respectful behaviors to this citizen	Yes	497	99.4
Duration of the officer's respectful behaviors	Brief	14	2.8
	Intermittent	49	9.8
	Dominant	436	87.2
Officer showed disrespectful behaviors to this citizen during the encounter	Yes	119	23.8
Trustworthiness			
Officer asked about citizen's well being	Yes	416	83.2
Officer offered comfort or reassurance to this citizen	Yes	183	89.3
Officer provided or promised to exert control or influence over another person for the citizen	Yes	101	96.2
Officer filed a report or promised to file a report for the citizen	Yes	125	96.9
Officer acted or promised to act on behalf of the citizen with a government agency or private organization	Yes	118	96.7

*Not all items indicating trustworthiness are applicable to each recorded incident

Aggregate procedural justice scale. An aggregate procedural justice scale from the four separate procedural justice indices (participation, neutrality, dignity/respect, and trustworthiness) was developed to produce a comprehensive assessment of officer behaviors. There was little guidance within the procedural justice literature regarding the formula for defining the relationship between the items within the four procedural justice variables. Some researchers assign more weight to variables depicting the quality of interpersonal behavior that is reflected in items assessing dignity/respect and trustworthiness (Tyler, 2009; Tyler & Fagan, 2008; Tyler & Huo, 2002). This study design suggests that the presence of all procedural justice constructs is important. Rather than attempting to determine which of the four pillars of procedural justice are the most important within police-citizen encounters, this study did not weight the variables to produce the aggregate. The aggregate scale was developed by a sum of all variables.

Appendix J details the results of the factor analysis, which includes each of the four indices (participation, neutrality, dignity/respect, and trustworthiness) and the aggregate procedural justice scale. A principal components analysis was used as the extraction method for the factor analysis. Appendix J also provides a correlation matrix of the procedural justice variables, the aggregate procedural justice scale, and citizen behaviors.

This study was designed based upon the four pillars of procedural justice that are broadly documented within the procedural justice literature. The factor analysis and correlation matrix are offered to support the methodological approach but each of the procedural justice indices were retained as part of the aggregate scale due to the ideological underpinnings of this study.

Characteristics of the situation. Items used to address the second research question (how do characteristics of the situation, the officer, and the citizens influence the type of treatment citizens receive) include type of incident, length of incident, presence of a supervisor, number of citizens present at the incident, initiator of the incident, and nature of the incident. Citizen(s) age, race, and gender were also considered.

Demographic variables. Demographic variables include rank, length of service, age, race, and gender.

Citizen behaviors. Since the researcher did not speak with citizens about their perceived level of procedural justice, citizen behaviors were assessed. The researcher answered the following questions: “citizen attitude displayed toward police at the end of the encounter,” “citizen showed respectful behaviors to the officer during the encounter,” “duration of the citizen’s respectful behaviors,” and “citizen showed disrespectful behaviors to the officer during the encounter.” Citizen behaviors exhibited within a police-citizen interaction are an indicator of satisfaction (or lack of) with the police.

Coding

All variables were coded as indicated in Appendix I. Type of variable, level of measurement, and variable attributes are listed in the tables.

Research Permission & Ethical Considerations

The research methods described in this study include details on the design, sample, and data collection that limit harm of the human subjects. Ethical considerations were examined at each phase of this study. This research was conducted in accordance with the regulations of the Institutional Review Board (IRB). The Request for Review was filed, providing information about the principal investigator, the project title and description, type of review requested, and

description of research subjects. Within the application, a project description and its significance, methodology, participants, and status were outlined. The submission requested an expedited review based upon the nonparticipant observation recordings that took place in the subjects' natural setting, anonymous survey questionnaire, and that the secondary data were collected for non-research purposes. The sensitivity of the data collected was not likely to increase the overall risk to the research participants. While observation participants can be identified, this study posed minimal risk. Permission of the IRB was obtained (HM20005696).

Voluntary Participation

Survey data collection. Voluntary participation of survey respondents was acquired through several steps. Potential respondents were contacted through email by the researcher. The email stated that participation was voluntary. An unsigned informed consent form was developed for the officer perception survey (Appendix B). The form stated that the participants are guaranteed certain rights, agree to be involved in the study, and acknowledge that their rights are protected. A statement regarding informed consent was attached to the web-based questionnaire.

Observation data collection. The footage used to collect SSO data was secondary. The BWC footage used to assess officer and citizen behaviors was captured for law enforcement purposes and shared for this study. Individual officers and citizens were not given the opportunity to decline participation in this study. The VCUPD chief of police provided voluntary consent on behalf of the uniformed officers who were observed.

Confidentiality and Anonymity

Survey data collection. The web-based software system utilized to generate the online questionnaire kept the responses anonymous. The survey software platform protected the

identity of survey participants. Responses were not traceable and were secured by password protection. The responses were in possession of only the researcher and the dissertation adviser. Responses were not linked to any one participant at any time.

SSO data. Observation data were collected using the agency's web-based BWC storage platform. The researcher accessed the footage using the password-enabled evidence.com feature that allows playback of all footage recorded and preserved during the officer's work in the community. The researcher used a web-based software system to tabulate the data. This system was designed to keep the data confidential. The data were in possession of only the researcher and the dissertation adviser.

The nature of BWC footage prohibits anonymity. All identifying information regarding the incident and the officer participants was removed prior to analysis. Case numbers and officer names were listed within the SSO protocol in order to keep track of incidents that had been reviewed so that data were collected according to the research plan. This identifying information was not coded or entered into SPSS for analysis. The data collected regarding citizen participants do not contain any identifiable information and the researcher did not record any personal identifiers.

SSO occurs covertly, which introduces some ethical implications. Many police-citizen interactions depict negative events within a citizen's life. This notion occupies the center of the debate regarding BWC footage and its availability to the public. Police-citizen encounters are made up of an exchange of personal identifiers (i.e. birthdate and social security number), criminal history information, victimization, and a host of potentially awkward and embarrassing admissions. Individuals involved in police-citizen encounters do not expect others to observe what is often a negative time in their life. BWC footage allows observers to witness most, if not

all, of the police-citizen encounter, which makes anonymity impossible, and confidentiality instrumental in maintaining the privacy of those involved.

Design Limitations

There were several design limitations that warrant explication. This study was confined to only the VCUPD. Access to the data drove this choice but the broadness of this study would make it easy to replicate in any other police department operating a BWC program.

The study assessed citizen behaviors based upon the measures contained in the observation instrument. Citizens were not surveyed or interviewed regarding the interactions. The study did not directly access citizen perceptions of interactions with officers regarding the interactions during police contacts. Citizen behavior observations provided the basis for which feelings and judgments were made.

Given that this study involved only one police department in one city, the findings may not generalize to other police departments. While police agencies share similar goals and structure, each agency serves unique constituencies and faces specific crime and social problems. Therefore, the findings may not be generalizable.

In the survey data collection portion of the study, there was a potential risk of a non-response error. Non-response error is caused by a low response rate due to potential differences between those who respond and those who opt not to participate (Frankfurt-Nachmias & Nachmias, 2008). Social desirability limitations also existed because there may be certain facts or events that respondents would rather not report accurately in a survey (Frankfurt-Nachmias & Nachmias, 2008).

Sample size is also a limitation within the survey phase of this study. There were only 58 eligible officers to complete this survey, as these officers were the uniformed officers equipped

with body worn cameras. An issue with small samples is that they may not offer enough cases to get a significant result.

Due to the nature of nonparticipant observation research, the data obtained in the observational data collection portion of the study may be subjective (Frankfurt-Nachmias & Nachmias, 2008). Because of the interpretative nature of observational research, the researcher may have introduced bias when assessing behaviors (Frankfurt-Nachmias & Nachmias, 2008). Inter-observer reliability testing was conducted to mediate this concern.

The nature of observation research requires the quantification of qualitative data derived from observations. An element of textual meaning and narrative layering that adds value to qualitative data is lost in this approach. The richness of qualitative data is based, in large part, upon these qualities. This specific design was limited by the conversion of an organic interaction between individuals (officers and citizens) into a narrowly defined set of categories.

Validity and Reliability

The extent to which a study's results can be generalized to other people or settings reflects its external validity (Isaac & Michael, 1971). The researcher increased external validity through systematic assignment. The database containing the observation data was organized by time and date. The footage from each police-citizen contact was stored in order of occurrence. Since the use of systematic assignment increases external validity (Isaac & Michael, 1971), the researcher began from a random starting point and selected every third contact for assessment. While police agencies share similar goals and structure, each agency serves unique constituencies and faces specific crime and social problems. Therefore, the findings may not generalize to other police departments. The researcher sought to contribute to the literature and these findings may pose policy implications that can be tested through additional research.

Internal validity occurs when a researcher controls extraneous variables to prevent systematic error (Frankfurt-Nachmias & Nachmias, 2008). The researcher addressed internal validity in a few ways. Internal validity during the observations was increased by cross checking the protocol used to evaluate the recordings to ensure that the collected data did not contain obvious mistakes. The researcher did not use observation data collected by another party. The cross-sectional data was collected all at once during the period of several months and not over an extended period of time.

The researcher utilized the dissertation adviser and committee for peer debriefing and external auditing to enhance the accuracy of the accounts and provide an objective assessment of the project throughout the research and at the conclusion of the study.

Inter-observer Reliability

There is a degree of subjectivity associated with observational research (Mastrofski, Parks, & McCluskey, 2009; Worden & McLean, 2015). Citizen behaviors and behaviors can be subjective. When humans are a part of a measurement procedure, the results have the potential to be unreliable or inconsistent. Since this study involves the assessment of human behavior, it is important to establish the highest degree of reliability possible within the design. The researcher employed an inter-observer reliability test to contrast assessments with those of non-researchers of varying race, gender, and age. The researcher is a white female with potential biases in favor of law enforcement personnel and therefore sought to compare assessments of citizen behaviors and behaviors with the assessments of 12 non-researchers of varying ages, genders, and ethnicities.

Inter-observer reliability is used in observational research to score the level of consensus existing in the ratings given by observers (Gwet, 2014). This refers to the degree to which

different people are consistent in their assessments of the same behaviors. This is accomplished by establishing inter-observer reliability outside of the context of the study measurement. The researcher accomplished this task by conducting an internal consistency reliability estimation to examine the correlation between her scores and those provided by the non-researchers.

Internal consistency reliability estimation is conducted by using a single measurement instrument administered to a group of people on one occasion to estimate reliability (Gwet, 2014). The goal is to assess the reliability of the instrument as a way of capturing comparable scores of the same behaviors by estimating how consistently the items that reflect the same construct yield similar results. This is accomplished by examining the consistency of the results in different items for the same construct within the measure (Gwet, 2014). There are a wide variety of internal consistency measures that can be used (Gwet, 2014).

In the present study, the researcher enlisted the assistance of 12 volunteers of varying demographics who were unfamiliar with the study and unaffiliated with law enforcement. The researcher requested the assistance of a convenience sample of VCU students and community members by emailing a written request for assistance with the study. The information sheet found in Appendix D was distributed electronically to inform potential participants of the participation process. Anyone interested in participating in the study was instructed to reply to the email with basic demographic information so that selections could be made. Since the goal was to acquire opinions of all demographic types, random selection was not utilized. The researcher used the demographic information to select participants of varying race, gender, and age. A demographic breakdown of all participants is found in Table 8.

Table 8: Inter-observer reliability participant demographics

Race	Gender	Age
White	Male	40
	Female	33
Black	Male	37
	Male	25
	Female	23
	Female	41
Hispanic	Male	35
	Female	20
Asian	Male	28
	Male	18
	Female	21
Other	Male	16

The researcher selected 12 videos of varying length and incident type involving officers and citizens of varying demographics. All participants were scheduled to observe the recordings and complete a standardized rating sheet that was developed using the same items that are contained in the observation instrument. The inter-observer reliability questionnaire was modified to include only the items related to citizen behaviors exhibited in the interaction since these are the items in the instrument that are most subjective. The instrument used for data collection can be found in Appendix F.

The informed consent sheet found in Appendix E was explained and distributed to all participants. Participants were given background information, an explanation of the significance of the study, and an overview of the procedures of the inter-observer reliability data collection process. The researcher provided a summary of what the participants could expect to view on the recordings. Participants were also provided a list of indicators of human behavior (Appendix G) for which they could use in rating citizen behavior. Participants were instructed to use the list

as a tool with the understanding that not all indicators would be contained on the list.

Participants then used the instrument to assess the 12 videos.

Inter-observer Reliability Results

There was little variation between the researcher's recorded responses and the participants' responses. The researcher filtered the responses by video and reviewed standard deviation for all raters. The standard deviations for the majority of the videos suggested little or no variation. For a few of the videos, the standard deviation is greater but there is still high internal consistency based on a review of the responses. Results are provided in Table 9.

Table 9: Inter-observer reliability standard deviation results

Video		Mean	Std Deviation
Video 1	Attitude displayed toward police at the end of the encounter	1.08	.862
	Duration of respectful behaviors	1.69	.855
Video 2	Attitude displayed toward police at the end of the encounter	.69	.480
	Duration of respectful behaviors	1.77	.439
Video 3	Attitude displayed toward police at the end of the encounter	.77	.439
	Duration of respectful behaviors	2.15	.376
Video 4	Attitude displayed toward police at the end of the encounter	.00	.000
	Duration of respectful behaviors	3.00	.000
Video 5	Attitude displayed toward police at the end of the encounter	1.92	.277
	Duration of respectful behaviors	1.08	.277
Video 6	Attitude displayed toward police at the end of the encounter	1.77	.439
	Duration of respectful behaviors	1.23	.439
Video 7	Attitude displayed toward police at the end of the encounter	.85	.376
	Duration of respectful behaviors	2.23	.439
Video 8	Attitude displayed toward police at the end of the encounter	1.77	.439
	Duration of respectful behaviors	1.46	.519
Video 9	Attitude displayed toward police at the end of the encounter	.85	.555
	Duration of respectful behaviors	1.85	.376
Video 10	Attitude displayed toward police at the end of the encounter	3.00	.000
	Duration of respectful behaviors	.00	.000
Video 11	Attitude displayed toward police at the end of the encounter	1.77	.439
	Duration of respectful behaviors	1.00	.000
Video 12	Attitude displayed toward police at the end of the encounter	3.00	.000
	Duration of respectful behaviors	.00	.000

The objective of this chapter was to outline the methodology employed within this study. An explanation of the methodological approach using a concurrent nested mixed methods design employing survey and systematic social observation data collection procedures was provided. The participants and study site were explained and followed by a detailed description of the data collection process. Aims of the study were also offered. The following chapter will report the results the study.

Chapter 4: Results

The primary objectives of this study were to examine the extent to which procedural justice behaviors occur within police-citizen interactions and how such actions may impact citizen behaviors and other incident outcomes. The researcher opted to follow an existing analytical framework in this study. Jonathan-Zamir and colleagues' (2013) study formed the basis for analysis. Increasingly sophisticated statistics were employed until the tests lost significance. Frequencies, ANOVA, correlation, factor analysis, and multivariate regression were conducted.

The first section of the results chapter reports the officer perception survey results, which examined the state of procedural justice from the officers' perspective. The second section addresses the first research question and hypotheses regarding the extent to which procedural justice behaviors are exhibited within police-citizen encounters. The third section is used to address the second and third research questions and hypotheses, which test the effects of procedurally just behaviors on citizen behaviors. The results are presented by method (survey and SSO findings) and by model. The data were analyzed to address the following research questions and hypotheses.

1. How do officers exercise different levels of procedural justice?
2. How do characteristics of the situation, the officer, and the citizens influence the type of treatment citizens receive?
3. What effect do officers' procedurally just behaviors have on citizen behaviors toward police?

H1: Officers exercise procedurally just behaviors consistently among all incident characteristics.

H2: Officers exercise procedurally just behaviors consistently among all citizen characteristics.

H3: Officers exercise procedurally just behaviors consistently among all officer characteristics.

H4: When officers employ procedurally just behaviors, citizen behaviors toward police are more likely to be positive.

Survey Results

The first set of models depicts the officer perception survey results. Officers were asked a series of questions based upon procedural justice constructs. Table 10 outlines the officer survey descriptive results of the items that were used for the analyses. Descriptive statistics and ANOVA did not reveal any significant results regarding officer perceptions of procedural justice. Descriptive results indicated that officers generally feel that they are well trained on procedural justice dimensions. Means for each of the questions ranged from 3.07 to 3.34 out of 4.

Table 10: Descriptives of officer perceptions of procedural justice

Item	M	Std Deviation
The department requires me to encourage citizens to tell their side of the story	3.07	.728
My supervisors view accusations of police discrimination against citizens very seriously	3.34	.690
I have been well trained to interact with citizens in a fair and respectful manner	3.21	.614
My department is concerned with whether officers comfort and reassure citizens who are distressed	3.19	.712

Table 11 reports the group differences in procedural justice dimensions from the officer perception survey. Since descriptive results indicated that officers feel well trained on procedural justice dimensions, length of police service was used to analyze these results further. ANOVA, when run with the survey questions and a bimodal length of service (0-5 years of

service=novice and 6 or more years of service=veteran) yielded no significant results. There were no significant differences across other officer demographics.

Table 11: ANOVA: Group differences in procedural justice dimensions

Item		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Sig.
						Lower Bound	Upper Bound	
The department requires me to encourage citizens to tell their side	Novice	25	3.08	.640	.128	2.82	3.34	.929
	Veteran	32	3.06	.801	.142	2.77	3.35	
	Total	57	3.07	.728	.096	2.88	3.26	
I have been trained to interact with citizens in a fair and respectful manner	Novice	26	3.2	.765	.150	2.92	3.54	.854
	Veteran	31	3.19	.749	.135	2.92	3.47	
	Total	57	3.21	.750	.099	3.01	3.41	
My supervisors view accusations of discrimination seriously	Novice	26	3.31	.679	.133	3.03	3.58	.715
	Veteran	32	3.38	.707	.125	3.12	3.63	
	Total	58	3.34	.690	.091	3.16	3.53	
My department is concerned whether officers comfort and reassure citizens	Novice	26	3.19	.749	.147	2.89	3.49	.980
	Veteran	32	3.19	.693	.122	2.94	3.44	
	Total	58	3.19	.712	.094	3.00	3.38	

Observation Results

The second set of models depicts observation data analysis. These models address the research questions and hypotheses.

Levels of Procedural Justice within Police-Citizen Encounters

Research question one is concerned with the amount of procedural justice that is exhibited within police-citizen interactions. Each item contained within the observation instrument was combined to form procedural justice indices for participation, neutrality, dignity/respect, and trustworthiness. The procedural justice indices were analyzed separately

and as part of an aggregate procedural justice scale that depicts the existence of procedurally just behaviors that occurred within this study. The frequency of each index is reported here.

Participation. Items within the instrument related to participation (officer asked the citizen to provide information/viewpoint, citizen provided information/viewpoint, and officer expressed interest in viewpoint) were combined to form a participation index. The participation index ranged from 0 (very low) to 4 (very high). The more behaviors of participation that the officers exhibited, the higher the overall score. The distribution of the participation index is found in Table 12.

Table 12: Participation frequency distribution

	Frequency	%
0	10	2
1	22	4.4
2	54	10.8
3	46	73.6
4	368	9.2
Total	500	100

Neutrality. Items within the instrument related to neutrality (officer indicated he would not make a decision about what to do until s/he had gathered all the necessary information, officer explained why the police became involved in the situation, and officer explained why s/he chose to resolve the situation as s/he did) were combined to form a neutrality index. The neutrality index ranged from 0 (low) to 3 (high). The more neutral behaviors that the officers exhibited, the higher the overall score. Distribution of the neutrality index is found in Table 13.

Table 13: Neutrality frequency distribution

	Frequency	%
0	35	7
1	34	6.8
2	113	22.6
3	318	63.6
Total	500	100

Dignity and respect. Items within the instrument related to respect or disrespect (officer showed respectful behaviors to this citizen, duration of the officer’s respectful behaviors, officer showed disrespectful behaviors to this citizen during the encounter) were combined to form an overall dignity/respect index. The dignity/respect index ranged from 0 (very low) to 4 (very high). The more respectful behaviors that the officers exhibited, the higher the overall score. The distribution of the dignity/respect index is found in Table 14.

Table 14: Dignity/respect frequency distribution

	Frequency	%
1	4	.8
2	22	4.4
3	403	80.8
4	70	14.0
Total	499	100*

Trustworthiness. Items within the instrument are related to trustworthiness and showing concern. Police officers who exhibit care and concern generally offer police services, provide information, express compassion, and take appropriate police action. These items were combined to form an overall trustworthiness index. The trustworthiness variable ranged from 0 (very low) to 4 (very high). The more trustworthiness behaviors that the officers exhibited, the higher the overall score. The distribution of the trustworthiness index is found in Table 15.

Table 15: Trustworthiness frequency distribution

	Frequency	%
0	4	.8
1	0	0
2	0	0
3	2	.4
4	3	.6
5	86	17.2
Total	95	19
N/A	405	81

*Not all items indicating trustworthiness are applicable to each recorded incident

Influence of Incident Characteristics on Procedural Justice Behaviors

Table 16 reports the results of a multiple regression model of incident characteristics (incident type, initiator of the incident, presence of outside agency officials, and presence of supervisor) as determinants of procedural justice behaviors. This table addresses research question two and hypothesis one regarding officers exercising procedurally just behaviors consistently among all incident types. These factors were considered because dynamics such as the reason that the police came in contact with the citizen and the presence of others during the encounter may have an impact on the level of procedural justice that is displayed. Incident characteristics that were considered included incident types (misdemeanor, felony, traffic infraction, etc.), initiator of the incident (officer, citizen, bystander), presence of other agency officials, and presence of a supervisor. This model was not significant ($F = 2.938$ and adjusted $R^2 = .076$); the model only accounted for .07 percent of the variance in procedural justice behaviors. Within the model, presence of an outside agency official (i.e. Richmond Police Department officer) produced statistical significance on procedural just behaviors ($p = .02$), indicating that officers exhibited less procedural justice when being observed or assisted by officers from neighboring jurisdictions. Incident type approached significance ($p = .09$), which

could be explained by the types of interactions that exist within varying calls for service and self-initiated contacts.

Table 16: An examination of incident characteristics and procedural justice behaviors

Variable	PJ behaviors			
	b(SE)	β	t	Sig.
Incident type	-.132(.077)	-.184	-1.707	.091
Initiator of the incident	-.209(.279)	-.082	-.748	.456
Presence of outside agency official(s)	-1.247(.552)	-.240	-2.260	.026*
Presence of supervisor(s)	-.323(.435)	-.074	-.741	.460
Adjusted R ²	.076			
F test	2.938			

p<.001***
p<.01**
p<.05*

Influence of Citizen Characteristics on Procedural Justice Behaviors

Table 17 provides results from testing the effects of citizen age, race/ethnicity, and gender to predict procedural justice behaviors exhibited toward the citizen during the police-citizen encounter. The model is not significant ($F = 2.255$ and adjusted $R^2 = .039$); the model only accounted for .03 percent of the variance in procedural justice behaviors. The model produced statistical significance with respect to gender of the citizen ($p = .024$) indicating that female citizens received higher levels of procedural justice than males.

Table 17: An examination of citizen characteristics and procedural justice behaviors

Variable	PJ behaviors			
	b(SE)	β	t	Sig.
Age	.329(.207)	.175	1.592	.115
Race/ethnicity	-.795(.243)	-.535	-.156	.141
Gender	-1.045(.456)	-.250	-2.293	.024*
Adjusted R ²	.020			
F test	1.649			

p<.001***

p<.01**

p<.05*

Influence of Officer Characteristics on Procedural Justice Behaviors

Table 18 provides results of testing the effects of officer age, race/ethnicity, gender, and length of police service on procedural justice within their encounters with citizens; however, this model is not significant (F = 2.105 and adjusted R² = .047); the model only accounted for .04 percent of the variance in procedural justice behaviors. The model produced statistical significance with regard to officer age (p = .014). This finding indicates that novice officers exhibited more procedural justice than their veteran counterparts. Recent academy training and a focus on negative police-citizen relations early in officers' career may explain this effect.

Table 18: An examination of officer characteristics and procedural justice behaviors

Variable	PJ behaviors			
	b(SE)	β	t	Sig.
Age	-.942(.378)	-.332	-2.584	.014*
Race/ethnicity	.066(.500)	.014	.421	.895
Gender	-.330(.710)	-.047	-.040	.643
Length of service	.266(.390)	.087	.678	.497
Adjusted R ²	.047			
F test	2.150			

p<.001***

p<.01**

p<.05*

Influence of Procedural Justice Behaviors on Citizen Behaviors

Table 19 is a predictive model of procedural justice behaviors on citizen behaviors when considering other incident characteristics. To predict citizen behaviors, incident characteristics were procedural justice, initiator of the encounter, nature of the incident, and outcome of the incident. This model is not significant ($F = 4.472$, adjusted $R^2 = .166$); the model only accounted for .16 percent of the variance in citizen behaviors. Within the model, two predictors were statistically significant: procedural justice ($p = .010$) and outcome of the encounter ($p = .024$). This indicates that citizen behaviors were most affected by how citizens were treated during the incident as well as the result of the encounter.

Table 19: An examination of procedural justice, incident characteristics, and citizen behaviors

Variable	Citizen behavior at the end of the incident			
	b(SE)	β	t	Sig.
Procedural justice	.164(.063)	.265	2.616	.010**
Initiator of the encounter	-.503(.302)	-.165	-1.670	.098
Nature of the incident	.204(.203)	.099	1.002	.319
Outcome of the incident	-.582(.252)	-.277	-2.300	.024*
Adjusted R ²	.166			
F test	4.472			

p<.001***
p<.01**
p<.05*

Summary of Key Findings

There were several key findings within this study. The objective of the officer perception survey data was to identify the current state of procedural justice from the officers' perspective. Results indicated that officers largely feel that they are well trained on procedural justice dimensions and that they are held accountable for their actions. While the model did not yield results of any significance, it is important to note the high level of procedural justice and accountability from the officers' perspective.

The objective of the observation data was to determine the factors that predict the presence of procedural justice as well as citizen behaviors during police-citizen encounters. When testing predictors of procedural justice during police-citizen encounters, the regression

models were not significant. Within these models, citizen gender, officer age, and presence of outside agency officials were the only factors that produced statistical significance.

When testing the predictors of citizen behaviors at the end of the encounter, the only factors that produced statistical significance were the presence of procedural justice behaviors and the outcome of the incident. Given the current sample and measures, these analyses support the existing procedural justice literature that indicates that a process-based procedural justice approach applied within police-citizen encounters may predict citizen behaviors. To a lesser extent, the outcome of the incident (i.e. arrest, warning, assistance) may also predict citizen behaviors.

When connecting officer perceptions with observations, this study suggests that officers who felt well trained in procedural justice may be equipped to exhibit high levels of procedural justice during police-citizen contacts. Since these officers report that the expectation of procedural justice within their interactions with the community exists within their agency, this may further explain the high levels of procedural justice that they exhibit when engaging the public.

In conclusion, this chapter examined the existence of procedural justice behaviors within police-citizen interactions and the extent to which the process-based procedural justice model could predict citizen behavioral outcomes. Other demographic and situational variables were considered to determine if they had an impact on procedural justice levels as well as citizen behaviors. While the results are reported herein, it is important to understand the meaning of these results in the context of the existing procedural justice literature and the potential policy implications. The following chapter will provide a discussion of these findings.

Chapter 5: Discussion

The present study attempts to expand the research on the theory of procedural justice by using systematic social observation to study police-citizen interactions captured by body-worn cameras. Although common in studies of community policing (Worden & McLean, 2014), the use of SSO in the procedural justice literature is rare (Jonathan-Zamir et al., 2013). Following a careful review of the scholarly literature, this is the first study to use body-worn camera footage to conduct a SSO of citizen and police behaviors within their interactions. This study introduces the use of BWC recordings as a mechanism for data collection, which should mediate the Hawthorne effect. Analyses were performed to determine the extent to which procedural justice occurs within police-citizen interactions and whether these behaviors could predict citizen behaviors during the encounter. Relationships between exhibited procedural justice behaviors and officer, citizen, and incident characteristics were also analyzed in order to better understand predictors of procedural justice and citizen behaviors. Knowledge and understanding of the ways in which officers demonstrate procedurally just behaviors in citizen contacts can provide insight into police legitimacy at the officer, agency, and industry levels.

There were several findings regarding the state of procedural justice within this study. The intent of the officer perception survey data was to better understand officers' perceptions of their agency's stance on procedural justice through the extent to which they perceive that they are required to behave in a procedurally fair manner. Officers reported that they are required to behave in such a manner and that they are well trained to do so. The high level of procedural justice that was exhibited during their interactions supported this finding. This is important when considering the implications of targeted training and overall agency philosophy. These findings are good for the state of policing. The officer perception survey data indicated that

officers feel that they are well trained on procedural justice dimensions and that they are held accountable for their actions. While the model did not yield results of any significance, it is important to note the high level of procedural justice and accountability from the officers' perspective.

In this study, the majority of officers exhibited procedurally just behaviors. This finding is consistent with prior research. The need for police to demonstrate high levels of procedural justice during citizen contacts can add to feelings of legitimacy (Sunshine & Tyler, 2003; Tyler, 2006; Tyler & Fagan, 2008). The public's feeling of trust and confidence in the police is as important within policing as curtailing crime and enhancing public safety (Haas, et al., 2015). Procedural justice assists in combatting negative feelings toward the police. Raising the level of trust and confidence of the citizens that they serve is as significant as effectively addressing crime and disorder (Haas et. al, 2015).

There are other reasons that high levels of procedural justice within police-citizen interactions can benefit officers and the community. Gau and Brunson (2015) conducted in-depth interviews with young males from disadvantaged, urban communities to examine police actions that are viewed as unjust and found that citizen behaviors could be associated with procedural injustice. They suggest that eroded police legitimacy could heighten self-protective behaviors that increase their risk of police scrutiny in the future (Gau & Brunson, 2015). Kruger and colleagues (2016) examined the relationship between crime density, procedural justice, and intention to report crime to the police. They found that procedural justice can impact the perception of crime within communities and suggest that trust in the police mediates the relationship between local crime density and interactions with the police (Kruger et al., 2016). Barkworth and Murphy (2015) conducted a multi-method study to examine the role that negative

affect plays in the effect of procedural justice on citizen compliance. They suggest that procedurally just behaviors are linked to a self-reported tendency to comply with the police but that negative affect mediates the relationship (Barkworth & Murphy). They further suggest that reducing negative emotions can contribute to higher levels of citizen compliance (Barkworth & Murphy, 2015).

This finding is also consistent with officer perception data that indicates that officers feel equipped to behave in a procedurally fair manner. Since officers reported that the expectation of procedural justice within their interactions with the community exists in their agency, this may explain the high levels of procedural justice that they exhibit when engaging the public. The high levels of observed procedural justice, as well as survey responses, may be attributed to the style of leadership that exists within this particular study site. This study was conducted in an agency managed by a hands-on chief of police and executive leadership staff. Their size and scope permit agency executives to significantly influence community relations at the officer level on a daily basis. As indicated in the officer perception survey results, officers are trained in procedural justice dimensions and report that their supervisors hold them accountable. Issues that would typically be handled by a front line or mid-level supervisor are often taken up the chain of command, promoting the chief's ability to heavily engage in daily operations and contributing to the autocratic nature of the agency. This authoritarian style of leadership may play a role in the results of this study.

Descriptive statistics indicate that officers were most consistent when applying respectful treatment, followed by trustworthiness, participation, and neutrality, respectively. Upon further review of these findings, specific areas of opportunity emerged. Officers failing to indicate to the citizen that they would not make a decision about what to do until they had gathered all of

the facts heavily impacted the neutrality score. Since the rest of the neutrality measures were high, it is likely that officers were neutral in their decision-making but never verbalized this intent to citizens.

Officers showed respect toward citizens in almost all of police-citizen interactions; however, they also exhibited disrespectful behaviors in almost a quarter of these encounters. This is an interesting finding in that it indicates that officers almost always behave respectfully, but that they may not be respectful consistently throughout their encounters. There are several reasons that this may occur (i.e. lack of patience, disrespectful treatment from citizens, stress, cynicism, a tipping point, etc.) but the high levels of respect indicate that raising awareness could mediate disrespect.

Training targeted toward the specific items that encompass each of the four procedural justice pillars of participation, neutrality, dignity/respect, and trustworthiness could produce higher frequencies for each of the items that were assessed. This study was conducted using footage of police-citizen interactions without additional training on procedural justice. If officers were instructed on the specific elements of procedural justice as well as the items on which they were assessed and the reasons that procedurally just behaviors lead to heightened citizen compliance and police legitimacy, they may enhance their individual approach to procedural justice.

Levels of procedural justice were exhibited fairly consistently when considering other factors, which supports the hypotheses regarding citizen, officer, and incident characteristics. When testing predictors of procedural justice during police-citizen encounters, the regression models were not significant; however, the models yielded three predictors of procedural justice: citizen gender, officer age, and presence of outside agency officials.

Citizen Gender

Results indicated that female citizens might receive higher levels of procedural justice than their male counterparts. There is very little research in the procedural justice literature involving gender disparity. When examining police care, Dai and Nation (2009) found that officers are more likely to provide aid and comfort to females. While they studied only one of the four elements of procedural justice, they also found that females are less likely to be subjected to verbal force or arrest (Dai & Nation, 2009). In their study involving discourteous behaviors toward police officers, Worden and McLean (2014) found that procedural injustice was more prevalent in males. In their observations of police-citizen contacts, Mastrofski, Jonathan-Zamir, Moyal, and Willis (2015) found that females experienced more procedural justice than males but that the relationship was not statistically significant. They also reported that no other officer or citizen characteristic could predict procedural justice (Mastrofski, Jonathan-Zamir, Moyal, & Willis, 2015). These findings suggest that females may receive higher levels of procedural justice but more research is needed to examine gender as a predictor of procedural justice.

Officer Age

This study also suggests that officer age might impact levels of procedural justice. Support for this finding could not be found within the procedural justice literature but it may suggest that recent training can impact levels of procedural justice. In this study, younger officers exhibited procedural at higher levels than their older counterparts, which could indicate that training, with a renewed emphasis on procedural justice dimensions, is working. Since younger officers have typically undergone rigorous pre-service training more recently than older officers, this may be an indication that the addition of procedural justice modules to annual in-

service training could produce consistency within age groups. More research regarding officer age is needed to better understand its effect on procedural justice.

Presence of Outside Agency Official

This study also suggests that the presence of an outside agency official might impact levels of procedural justice. No other studies offering similar findings were found. In this study, outside agency officials were generally officers from the Richmond Police Department, the agency's concurrent jurisdiction. It is likely that officers from these two agencies would respond to the same incident to support one another, especially in the case of a violent crime or large traffic accident. It is possible that the presence of other officers affects procedural justice behaviors because officers may express a level of gravitas or machismo in the presence of these outside agency officers. Perhaps when officers feel that others are observing them, they employ less procedural justice. More research is needed to better understand if this finding would emerge in other settings.

The most noteworthy implication with regard to procedural justice research is the impact of procedural justice on citizen behaviors. Since the literature links positive citizen behaviors with enhanced citizen satisfaction and police legitimacy, this study extends the existing literature (Gau, 2011; Gau et al., 2012; Murphy, 2009; Murphy et al., 2009; Reisig et al., 2007; Reisig & Lloyd, 2009; Sunshine & Tyler, 2006; Tyler, 2006; Tyler & Fagan, 2008; Tyler & Huo, 2002; Tyler & Wakslak, 2004). That is, this study suggests that procedural justice may predict positive citizen behaviors during police-citizen encounters, regardless of demographic or situational characteristics. In a model analyzing the impact of procedural justice behaviors, incident initiator, incident type, and incident outcome on citizen behavior, procedural justice and outcome were the only statistically significant factors in predicting citizen behaviors. These findings

provide support for Kunard and Moe's (2015) process and outcome approach to procedural justice. Kunard and Moe (2015) deconstructed the concept of procedural justice by stating that a citizen's assessment of an interaction with an officer is based on both the *process* (the way the officer came to make the decision and the ways in which the officer engaged the citizen in the decision-making procedure) as well as the *outcome* (the decision that the officer ultimately makes) of the encounter. This study suggests that procedural justice (process) and the outcome of the incident (outcome) may predicate citizen behaviors. These results are in line with previous studies that found support for Tyler's (2004) suggestion that citizens are concerned with fair treatment by the police as well as incident outcomes (Engel, 2005).

This study aligned with prior research demonstrating that police officers may possess some control over citizen behaviors and satisfaction (National Research Council, 2004; Schulhofer et al., 2011; Sunshine & Tyler, 2003; Tyler, 2004, 2009, 2011). Policing research consistently indicates that assessments of police legitimacy are based largely on citizens' views of the way that the police treat them, which is independent of how they do their job (Hinds & Murphy, 2007). Previous research suggests that when the police treat citizens in a procedurally just manner, citizens will be more likely to view the police as legitimate, and in turn possess more satisfaction with the police and be more likely to comply with the law. Public support is a fundamental principle within community policing so these findings are meaningful toward enhancing citizen satisfaction. Given the value of procedural justice behaviors within police-citizen encounters, it is important to develop strategies to heighten procedural justice aspects within police-citizen encounters. Since citizen satisfaction is more reliant upon procedural justice within police-citizen encounters than effectiveness of crime control (Hinds & Murphy, 2007), these findings may indicate that the police maintain some control over public perception,

even when they struggle to combat crime. Identifying factors that shape public opinion is important within contemporary policing, specifically within the current contentious climate where building and maintaining stronger partnerships between citizens and the police is a challenge.

Demonstrating that the police may possess some element of control over citizen behaviors through procedural justice can be hampered if demographic and situational characteristics play a significant role in public perceptions of police-citizen encounters. This study suggests that such characteristics play little to no role in citizen satisfaction when procedural just behaviors are present within the interaction. This finding aligns with the procedural justice literature.

The policing literature indicates that the influence of positive police-citizen encounters remains over time (Paternoster et al., 1997). Research suggests that citizens' assessment of their personal experiences with the police lay the groundwork for police support and deference to the law (Paternoster et al., 1997). Each positive police-citizen encounter therefore becomes a building block to stronger community-police relations that creates a partnership toward combatting crime. If the goal is to use each interaction as a bridge toward repairing and strengthening the relationship between the community and the police, these findings suggest that when employing procedurally just behaviors, agencies are working toward that end.

This study's policy implications center on the finding that police officers may have the ability to improve police-citizen contacts by employing procedurally fair behaviors. Recent events have led law enforcement agencies to rethink how they can build and maintain trust, confidence, and satisfaction with the communities that they serve. As agencies embrace this challenge, the concept of procedural justice as a means of attaining police legitimacy has

reemerged as a mechanism for attaining this goal. While the notion of procedural justice is simplistic in nature, execution of procedurally just behaviors can be somewhat nuanced. The intricacies of Tyler's (2004) process-based model of procedural justice may seem conventional at first blush, but unless officers are instructed on the four pillars of procedural justice, they may miss important opportunities to succeed through omission. Since Tyler (2004) states that police can heighten their perceived legitimacy and trustworthiness through their own words and actions, it is reasonable to assume that the way to accomplish this task is to include this theory in training. If police officers fully understand that procedurally just actions may lead to citizen cooperation and compliance with the law *and* that there are specific behaviors officers should exhibit, it is likely that an abstract concept could be translated into something more tangible.

The use of industry buzzwords such as community policing, police legitimacy, and procedural justice are often thrown about so frequently that they lose meaning and significance amongst the rank and file. Officers, who may not fully grasp these concepts or their implications, are expected to comply with agency objectives to enhance these matters on a daily basis. They are told to treat people with respect and display professionalism within every citizen contact but are not always given the context needed to turn the concepts of respect and professionalism into concrete actions that can be used on a daily basis. While there is an element of conventional wisdom associated with applying procedural justice to police actions, instruction is also needed at during pre-service academy training as well as throughout officers' careers as a key component of officers' in-service curriculum. Procedural justice behaviors should be taught upon hire and refreshed periodically. By thoroughly explaining the concept in a thoughtful and evidence-based approach and applying the information to real-world scenarios, officers may be equipped to shape their behaviors and better understand the reasons that they should.

Understanding the extent to which procedurally just behaviors occur within police-citizen interactions is an important step in enhancing police legitimacy at the agency level. This may be accomplished by assessing officers' behavior in a standardized and meaningful way. Upon review, if an agency finds that procedurally fair actions are not exhibited at a desirable level, additional training could be applied. The use of BWC footage in this pursuit allows agency leaders to play back examples of positive or negative conduct as an instructional tool for individual officers or agency-wide audiences. Seemingly mundane encounters are often valuable examples of desirable (or undesirable) behaviors.

Research suggests that simply the act of measuring behavior will lead to behavioral change (Webb et. al., 1996). The measurement process causes a level of reactivity that has long been acknowledged by researchers. While researchers seek to minimize the effects of observing or recording behavior through the use of inconspicuous methods, the police agencies have developed programs such as Compstat, which shine a spotlight on commanders and hold leadership accountable for their outcomes. Measurement draws attention to specific behavioral patterns and modifications in a format that is consistent with the expectations of those within leadership (Rosenbaum et al., 2015).

BWC programs are quickly becoming the norm, yet they are extremely costly to operate. There are a number of hidden costs associated with a properly functioning program that continue to emerge long after the technology has been launched. This footage is useful for a number of law enforcement reasons – the mere existence of the cameras is often its own justification – but much of the true value of this footage is not being discussed in the literature. This footage contains an enormous amount of information about the way in which an agency does business, on a daily basis, citizen by citizen. Each officer serves as an agent for their organization each

time that they interact with a member of the community. There are a number of ways that BWC footage can be used by the police. Supervisors and training divisions have found some utility in BWC playback for training scenarios. Both positive and negative contacts can be useful in the learning process – and this extends far beyond reviews of use of force incidents. This footage depicts officer conduct and community relations in its most organic form and serves as a useful source of training material. BWC footage can also supplement tactical training by providing real-world scenarios that can be deconstructed from the very beginning of the incident.

Interactions between humans are complex, especially considering the very nature of police-citizen contacts. Something seemingly minute can cause an interaction to become negative very quickly and it is possible that these triggers could be better identified when reviewing BWC footage. Watching others (or oneself) conduct their duties can help to better understand what went wrong within an interaction and perhaps improve future contacts. Bypassing the chance to systematically assess behaviors exhibited by the department's officers is a missed opportunity – one that 21st century law enforcement agencies cannot afford.

Limitations

The extant study has limitations that necessitate caution in conclusions drawn from the results. First, the data were drawn from a single, mid-sized jurisdiction, which narrows the scope of generalizability.

This study was conducted in an agency managed by an atypical leadership staff, which may play a role in the results. Issues that would typically be handled by a front line or mid-level supervisor are often taken up the chain of command to the chief, which may contribute to the high levels of observed procedural justice.

This study lacks citizen self-reporting. In order to assess citizen satisfaction, the researcher used citizen actions as an indicator of how satisfied they were with their interaction so citizen responses were not directly accessed in this study.

This study quantified qualitative observation data. There are many benefits of this design but in doing so; the results lack the richness that qualitative responses provide.

It was quickly determined that there are some limitations of this instrument within the current design. Each police-citizen encounter was assessed using the instrument, which provided the opportunity to capture police and citizen demographic information. The instrument assessed the interaction holistically rather than focusing on a specific officer or citizen. The instrument, however, was not ideal for capturing varying behaviors between police officers and citizens within the same encounter. This design maximized the ability to assess interactions between one officer and 1-3 citizens but fell short in more complex interactions. The researcher addressed this limitation by focusing data collection on the primary officer and the primary 1-3 citizens in the interaction.

There are some limitations to using BWC footage to observe human behavior. Sometimes the field of sight is not ideal and the volume is limited. In situations involving many moving parts, only a portion of what is usually a more volatile interaction was assessed. This is addressed by viewing related BWC footage captured by another officer but could impact data analysis and overall themes.

Future Research

These limitations offer directions for future research. The present study was conducted at the VCU Police Department, a mid-sized, campus police department in an urban setting. This study should be replicated in larger, smaller, and non-campus police agencies to conclude

whether the results hold. Research indicates that positive policing initiatives, such as community policing programming, improve citizen satisfaction with the police in suburban and rural areas (Maguire, Kuhns, Uchinda, & Cox, 1997) as well as small cities (Adams, et al., 2005). Similar efforts may be less effective in large cities (Schnieder, Rowell, & Bezdikian, 2003). Since smaller agencies are more likely to encourage non-enforcement, service-oriented encounters, citizens may possess higher levels of satisfaction with the police than citizens residing in larger, urban communities with disproportionate levels of crime-related contacts (Cordner & Scarborough, 1997). While the safety of the agency's jurisdiction is the primary focus of all police departments, varying size and scope may impact service delivery and community relations.

Overwhelmingly, procedural justice studies are conducted at the jurisdictional level (Hinds & Murphy, 2007). Reisig and Correia (1997) studied procedural justice at the city, county, and local levels and found varying responses by age, outcome, and initiator of the encounter. Their study suggests that there is value in contrasting varying agencies and locations, specifically regarding the unique characteristics of certain types of agencies (i.e. sheriff's office employees who work for elected officials and police department employees who work for appointed officials) (Reisig & Correia, 1997).

These findings lay the foundation for future studies to examine the role of procedural justice within police-citizen encounters using SSO to assess the behaviors of police officers and citizens. Future studies may consider a mixed methods approach employing SSO and citizen self-reporting. Since the two primary methods of assessing procedural justice within police-citizen interactions are through self-report and observation, it would be instructive to study both using the same sample.

Future studies may consider utilizing qualitative methods by conducting interviews or focus groups with citizen participants where they ask open-ended questions to further assess citizen behaviors. Observed citizen and police behaviors, when compared with self-reported perceptions, could be useful in learning more about the significance of procedurally just behaviors within police-citizen interactions. The previously discussed limitations that result from employing either a self-report or observational design could be mitigated with a mixed methods approach.

Given the current climate within citizen-police relations, future studies could also include specific measures of citizens' pre-conceived opinions of the police apart from the current encounter. Since the policing literature suggests that citizen perceptions of the police are also built upon factors apart from their own encounters (PERF, 2014; Tankebe, 2009; Tyler & Huo, 2002; Tyler & Wakslak, 2004), future studies could benefit from investigating the ways in which specific encounters impact overall feelings of legitimacy, specifically when contrasted with their own interactions.

It would also be beneficial to better understand officer perceptions of procedural justice. The present study surveyed officers using a close-ended questionnaire to gauge officer perceptions of the significance of procedural justice within their agency as well as their attitudes toward procedurally just behaviors. Further research could benefit from a qualitative approach to meet similar goals. Officers may shed light on their level of understanding of procedural justice as a concept, the extent to which they consider employing procedurally just behaviors during their interactions, and the ways in which their agency encourages them to do so.

In future studies, the observation instrument should include items that capture variances in citizen and police behavior more effectively. Many factors impact behavior within a police-

citizen encounter so enhancing the instrument to better reflect these variables would be beneficial.

Finally, there are some limitations to using BWC footage to observe human behavior. The researcher mediated technology issues by eliminating videos that were not properly recorded. However, within each video, the researcher can only see and hear what the recording officer captures. Sometimes the field of sight is not ideal and the volume is limited. In situations involving many moving parts, the researcher sees only a portion of the encounter of what is usually a more volatile interaction, and arguably misses an opportunity to assess variances in behavior that may contribute to citizen outcomes. This can usually be mediated by assessing related BWC footage captured by another officer but could impact data analysis and overall themes.

Conclusions

This study is most useful in offering a new way to assess police behavior. Systematic social observation is an important method for better understanding human interactions. Given the emergence of BWC programs as an important technological advancement within policing, this design could be implemented within any agency utilizing body worn cameras. The nature of BWC programs requires agencies to retain a great deal of data. BWC cameras were not designed or marketed for collecting data for empirical analysis. Agencies rely upon this emerging technology to enhance agency transparency, address citizen complaints of misconduct, and review incidents involving applied force. BWC cameras have emerged as a way to referee police-citizen interactions during potential policy violations, when force is applied, or when an officer's conduct is called into question. This study suggests that the existence of this footage

offers a unique ability to systematically assess officer behavior and better understand the current state of procedural justice at individual agencies and throughout the nation.

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Appendix A

Survey Questions

Please complete the following questionnaire to assess your understanding of the principles of procedural justice. Feel free to be honest on this survey, as nothing you say will ever be directly linked to you.

Please indicate whether you strongly agree, agree, disagree, or strongly disagree with the following statements as they pertain to you and your agency.

	Strongly Agree	Agree	Disagree	Strongly Disagree
The department requires me to encourage citizens to tell their side of the story				
I have been well trained to interact with citizens in a fair and respectful manner				
I have been well trained to interpret and employ departmental policies and procedures				
I have been well trained to independently solve problems in my jurisdiction during my shifts				
I have been well trained to employ community policing strategies during my interactions with citizens				
I have been well trained on officer-safety measures				
My supervisors view accusations of police discrimination against citizens very seriously				
My department is not concerned whether officers comfort and reassure citizens who are distressed				

DEMOGRAPHICS

1. What is your age (years)?
 - 21-29
 - 30-39
 - 40-49
 - 50 and older

2. How many years of experience do you have in local law enforcement?
 - 0-5 years
 - 6-10 years
 - 11-19 years
 - 20 or more years

3. What is your rank?
 - Officer/Detective
 - Sergeant

4. What is your gender?
 - Male
 - Female

5. What is your ethnicity?
 - Caucasian
 - African American
 - Asian American
 - Hispanic
 - Other

Thank You & Next Steps

Thank you for taking the time to complete this important survey. Results will be shared with participants when the data has been collected and summarized.

Appendix B

Informed Consent: Survey Questions

Virginia Commonwealth University Study Information Sheet

The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen behaviors
and Other Outcomes

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- You are being asked to participate in a research study assessing your perceptions of procedural justice at the VCUPD.
- You are eligible to participate in this study if you are sworn officer at the VCUPD.
- The research procedures involve an online survey that will take approximately 10-15 minutes to complete.
- Possible risks/discomforts associated with the study are a breach of confidentiality.
- There are no direct benefits from participation in the study. However, this study may assist in a better understanding procedural justice at the officer level.
- You will not be compensated for your participation in this research study. The research team will provide you with the results of the study, upon analysis of the data collected.
- All research data collected will be stored securely and confidentially in the possession of the research team. The survey is conducted anonymously and no efforts will be made to identify respondents.
- The research team, authorized VCU personnel, may have access to your study records to protect your safety and welfare. Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law.
- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.

- Please contact VCU's Office of Research by email at erahelp@vcu.edu or at 800 Leigh Street, Richmond, VA 23298 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.
- Participation in this study is voluntary. There is no cost to you for participating. You may choose to skip one or more questions. You may refuse to participate or discontinue your involvement at any time.

Appendix C

Observation Instrument

BWC ID

Time of day

- Day shift
- Evening shift
- Midnight shift

Number officers on call

- 1
- 2-3
- 4 or more

Supervisor(s) present?

- Yes
- No

Presence of RPD or other agency official

- Yes
- No

Primary officer on call

- Yes
- No

Recording officer name

Recording officer age

- 21-29
- 30-39
- 40-49
- 50 and older

Recording officer race

- Caucasian
- African American
- Asian American
- Hispanic
- Other

Recording officer gender

- Male
- Female

Recording officer length of service

- 0-5 years
- 6-10 years
- 11-19 years
- 20 or more years

Other officers and demographics (same as above)

Number of citizens on stop

- 1
- 2-3
- 4 or more

Length of call

- 1:01-5:59 minutes
- 6-9:59 minutes
- 10 minutes or more

Initiator of the call/incident:

- Officer
- Individuals involved in call
- Bystander/other citizen

Citizen age

- Juvenile
- 18-20
- 21-29
- 30-39
- 40-49
- 50 and older

Citizen race

- Caucasian
- African American
- Asian American
- Hispanic
- Other

Citizen gender

- Male
- Female

Other citizens and demographics (same as above)

Nature of the problem

- Traffic stop
- Criminal – felony
- Criminal – misdemeanor
- Nuisance/vagrancy
- Citizen assist
- Officer assist only (VCUPD/RPD/other agency)
- Substance abuse
- Sexual assault/domestic/dating violence
- Suspicious person/situation

Setting/location

- Outdoors – residence
- Outdoors – public property
- Outdoors – business/merchant
- Indoors – residence
- Indoors – public property
- Indoors – business/merchant
- Vehicle/street/highway
- Other

PROCEDURAL JUSTICE

Participation

Officer asked the citizen to provide information/viewpoint

- Yes
- No

Citizen provided information/viewpoint

- Yes
- No

Officer expressed interest in information/viewpoint

- Dismissive listener
- Inattentive listener
- Passive listener
- Active listener

Neutrality

Officer expressed desire to hear all viewpoints

- Yes
- No

Officer indicated he would not make a decision about what to do until s/he had gathered all the necessary information

- Yes
- No

Officer explained why the police became involved in the situation

- Yes
- No

Officer explained why s/he chose to resolve the situation as s/he did

- Yes
- No

Dignity and respect

Officer showed respectful behaviors to this citizen during the encounter

- Yes
- No

Duration of the officer's respectful behaviors

- Brief
- Intermittent
- Dominant

Officer showed disrespectful behaviors to this citizen during the encounter

- Yes
- No

Trustworthy motives: Showing care and concern

Officer asked about citizen's well being

- Yes
- No
- Not applicable

Officer offered comfort or reassurance to this citizen

- Yes
- No
- Not applicable

Officer provided or promised to exert control or influence over another person for the citizen

- Yes
- No
- Not applicable

Officer filed a report or promised to file a report for the citizen

- Yes
- No
- Not applicable

Officer acted or promised to act on behalf of the citizen with a government agency or private organization

- Yes
- No
- Not applicable

Citizen behaviors

Citizen attitude displayed toward police at the end of the encounter

- Very positive
- Positive
- Neutral
- Negative
- Very negative

Citizen showed respectful behaviors to the officer during the encounter

- Yes
- No

Duration of the citizen's respectful behaviors

- Brief
- Intermittent
- Dominant

Citizen showed disrespectful behaviors to the officer during the encounter

- Yes
- No

Outcome

Officer employed community policing strategies

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Officer independently solved problems

- Strongly agree
- Agree
- Neutral

- Disagree
- Strongly disagree

Officer educated the citizen on personal safety measures

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Officer followed departmental policies and procedures.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Officer employed officer safety techniques taught in training

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Use of force (if yes, justified or unjustified)

- Yes
- No

Outcome of call

- Arrest
- FI
- Assist only
- No action

Appendix D

Inter-observer Reliability Data Collection

Virginia Commonwealth University Informed Consent

The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen behaviors
and Other Outcomes

Lead Researcher

Shana Mell

L. Douglas Wilder School of Government & Public Affairs
mellsm@vcu.edu (804) 828-5932

Faculty Sponsor

Will Pelfrey, Jr., PhD

L. Douglas Wilder School of Government & Public Affairs
wvpelfrey@vcu.edu (804) 828-2759

I am writing to formally request your assistance with a research project. I am seeking volunteers to assist me in determining my reliability in assessing body worn camera (BWC) footage for certain aspects of police-citizen interactions.

In research, it is important to establish the degree to which varying raters agree in the ways that they assess human behavior. In this case, I have observed a number of police-citizen interactions via BWC. Since I am a human judging other humans' behavior, which is subjective, I would like your assistance in determining the degree to which my assessments are reliable.

If you choose to assist, this will be accomplished by watching a series of videos and using a standardized instrument to score certain behaviors. Volunteers need no formal training to participate. I will provide instructions and a format for collecting your responses. At the completion, I will compare your results to mine so that I can measure the probability of agreement.

This exercise will be extremely valuable within my study and contribute to the validity and reliability of my research. If you are willing to participate, I will arrange a date and time that is most convenient to you. This will likely take 1-2 hours of your time.

Thank you for considering my request.

Appendix E

Information Sheet: Inter-observer Reliability Test

Virginia Commonwealth University Study Information Sheet

The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen behaviors
and Other Outcomes

Lead Researcher

Shana Mell

L. Douglas Wilder School of Government & Public Affairs
mellsm@vcu.edu (804) 828-5932

Faculty Sponsor

Will Pelfrey, PhD

L. Douglas Wilder School of Government & Public Affairs
wvpelfrey@vcu.edu (804) 828-2759

- You are being asked to participate in an inter-observer reliability assessment to assist with the above-mentioned study.
- You are eligible to participate in this study if you are not a member of a law enforcement agency.
- The research procedures involve an analysis of data that VCUPD staff members have already collected. These data include your responses to observations of BWC footage containing police-citizen interactions.
- Possible risks/discomforts associated with the study are a breach of confidentiality.
- There are no direct benefits from participation in the study. However, this study may assist in a better understanding procedural justice at the officer level.
- You will not be compensated for your participation in this research study. The research team will provide you with the results of the study, upon analysis of the data collected.
- All research data collected will be stored securely and confidentially in the possession of the research team. No efforts will be made to identify participants.
- The research team, authorized VCU personnel, may have access to your study records to protect your safety and welfare. Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law.

- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.
- Please contact VCU's Office of Research by email at erahelp@vcu.edu or at 800 Leigh Street, Richmond, VA 23298 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.
- Participation in this study is voluntary. There is no cost to you for participating. You may refuse to participate or discontinue your involvement at any time. If you choose to withdraw from this study, you may do so by contacting the researchers listed at the top of this form at any time.

Appendix F

Interrater Reliability Data Collection Sheet

BWC video number – open ended

Rater race

- White
- Black
- Hispanic
- Asian
- Other
- Researcher

Rater gender

- Female
- Male
- Researcher

Rater age – open ended

Citizen attitude displayed toward police at the end of the encounter

- Very positive
- Positive
- Neutral
- Negative
- Very negative

Citizen showed respectful behaviors to the officer during the encounter

- Yes
- No

Duration of the citizen's respectful behaviors

- Brief
- Intermittent
- Dominant

Appendix G

Citizen Behavior Indicators

Assessing physical demeanor

Facial expressions (smile, frown, no expression)
Eye contact (or lack of)
Facing toward the officer(s)
Looking at the officer(s) when he/she spoke
Nodding in agreement/understanding

Assessing verbal demeanor

Use of formal titles or sir/ma'am
Providing responses to questions
Explaining oneself
Voice tone, inflection, volume
Expressing phrases of gratitude
Accusations of misconduct
Verbal assault

Assessing behavioral demeanor

Taking direction from officer(s)
Complying with officers' request(s)
Displaying physical restraint
Physical assault

Appendix H

Table 20: Coding of officer perception survey measures

Measure	Level of Measurement	Attributes
Participation		
Required to encourage citizens to tell their side of the story	Ordinal	0=Strongly Disagree 1=Disagree 2=Neutral 3=Agree 4=Strongly Agree
Neutrality		
Discrimination is taken very seriously	Ordinal	0=Strongly Disagree 1=Disagree 2=Neutral 3=Agree 4=Strongly Agree
Dignity/respect		
Trained to interact with citizens in a fair and respectful manner	Ordinal	0=Strongly Disagree 1=Disagree 2=Neutral 3=Agree 4=Strongly Agree
Trustworthiness		
Expected to comfort and reassure citizens who are distressed	Ordinal	0=Strongly Disagree 1=Disagree 2=Neutral 3=Agree 4=Strongly Agree
Demographic		
Age	Ordinal	0=21-29 1=30-39 2=40-49 3=50 or older
Years of service	Ordinal	0=0-5 years 1=6-10 years 2=11-19 years 3=20 or more years
Rank	Nominal	0=Officer 1=Sergeant
Gender	Nominal	0=Female 1=Male
Race/ethnicity	Nominal	1=White 2=Nonwhite

Appendix I

Table 21: Coding of observation measures

Variable	Level of Measurement	Attributes
Participation		
Officer requested information/viewpoint	Nominal	0=No 1=Yes
Citizen provided information/viewpoint	Nominal	0=No 1=Yes
Officer expressed interest in information/viewpoint	Nominal	0=Dismissive 1=Inattentive 2=Passive 3=Active
Neutrality		
Officer expressed desire to hear all viewpoints	Nominal	0=No 1=Yes
Officer indicated he would not make a decision about what to do until s/he had gathered all the necessary information	Nominal	0=No 1=Yes
Officer explained why the police became involved in the situation	Nominal	0=No 1=Yes
Officer explained why s/he chose to resolve the situation as s/he did	Nominal	0=No 1=Yes
Dignity/respect		
Officer showed respectful behaviors to this citizen during the encounter	Nominal	0=No 1=Yes
Duration of the officer's respectful behaviors	Nominal	0=Brief 1=Intermittent 2=Dominant
Officer showed disrespectful behaviors to this citizen during the encounter	Nominal	0=No 1=Yes
Trustworthiness		
Officer asked about citizen's well being	Nominal	0=No 1=Yes 2=N/A
Officer offered comfort or reassurance to this citizen	Nominal	0=No 1=Yes 2=N/A
Officer provided or promised to exert control or influence over another person for the citizen	Nominal	0=No 1=Yes 2=N/A

Officer filed a report or promised to file a report for the citizen	Nominal	0=No 1=Yes 2=N/A
Officer acted or promised to act on behalf of the citizen with a government agency or private organization	Nominal	0=No 1=Yes 2=N/A
Officer demographics		
Recording officer age	Ordinal	0=21-29 1=30-39 2=40-49 3=50 and older
Recording officer race	Nominal	1=White 2=Nonwhite
Recording officer gender	Nominal	0=Female 1=Male
Recording officer length of service	Ordinal	0=0-5 years 1=6-10 years 2=11-19 years 3=20 or more years
Recording officer rank	Nominal	0=Officer 1=Sergeant
Situational characteristics		
Supervisor(s) present?	Nominal	0=No 1=Yes
Length of call	Ordinal	0=1:01-5:59 1=6-9:59 2=10-19:59 3=20 or more
Initiator of the call/incident	Nominal	0=Officer 1=Individuals involved 2=Bystander/other citizen
Citizen demographics		
Age	Ordinal	0=Juvenile 1=18-20 2=21-29 3=30-39 4=40-49 5=50 and older
Race/ethnicity	Nominal	1=White 2=Nonwhite
Gender	Nominal	0=Female 1=Male
Citizen behaviors		
Citizen attitude displayed toward	Ordinal	0=Very negative

police at the end of the encounter		1=Negative 2=Neutral 3=Positive 4=Very positive
Citizen showed respectful behaviors to the officer during the encounter	Nominal	0=No 1=Yes
Duration of the citizen's respectful behaviors	Nominal	0=Brief 1=Intermittent 2=Dominant
Citizen showed disrespectful behaviors during the encounter	Nominal	0=No 1=Yes
Situational characteristics		
Time of day	Nominal	0=Day shift 1=Evening shift 2=Midnight shift
Number officers on call	Ordinal	0=1 1=2 – 3 2=4 or more
Presence of RPD/other agency official	Nominal	0=No 1=Yes
Primary officer on call	Nominal	0=No 1=Yes
Setting/location	Nominal	0=Outdoors – residence 1=Outdoors – public 2=Outdoors – business 3=Indoors – residence 4=Indoors – public property 5=Indoors – business 6= Vehicle/street/highway 7=Other
Outcome of call	Nominal	0=Arrest 1=FI 2=Report taken 3=Assist only 4=No action 5=Traffic summons

Appendix J

Table 22: Descriptive statistics for procedural justice scales

Item	Mean	Std. Deviation
Participation Index	3.87	.392
Neutrality Index	2.81	.640
Dignity/Respect Index	3.28	.453
Trustworthiness Index	4.71	1.048
Aggregate PJ Scale	14.68	2.048
Cronbach's Alpha	.798	

Table 23: Principal components analysis of procedural justice scales

Index	Extraction Score	Component Matrix
Participation	.744	.863
Neutrality	.865	.930
Dignity/Respect	.022	.150
Trustworthiness	.924	.961

Appendix K

Table 24: Correlation matrix of procedural justice indices and expected outcomes

		Participation	Neutrality	Dignity/ respect	Trust- worthiness	PJ scale	Citizen behavior
PJ scale	Pearson	.797*	.910*	.315*	.963**	1	.296**
	Correlation	.000	.000	.002	.000		.004
	Sig (2-tailed)						
Variables							
Participation	Pearson	1	.657*	.110*	.739*	.797**	.227**
	Correlation		.000	.014	.000	.000	.000
	Sig (2-tailed)						
Neutrality	Pearson	.657*	1	.224*	.901*	.910**	.137*
	Correlation	.000		.000	.000	.000	.002
	Sig (2-tailed)						
Dignity/respect	Pearson	.110*	.224*	1	.127	.315*	.118**
	Correlation	.014	.000		.220	.002	.008
	Sig (2-tailed)						
Trustworthiness	Pearson	.739*	.901*	.127*	1	.963**	.247*
	Correlation	.000	.000	.220		.000	.016
	Sig (2-tailed)						
Expected outcome							
Citizen behavior	Pearson	.227*	.137*	.118*	.247*	.296**	1
	Correlation	.000	.002	.008	.016	.004	
	Sig (2-tailed)						

p<.01**

p<.05*

VITA

Shana M. Mell, Ph.D.

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RESEARCH AREAS

Counter-terrorism & intelligence, evidence-based crime policy, and procedural justice & police legitimacy

EDUCATION

- Ph.D. (2016) Public Policy & Administration, Virginia Commonwealth University, Richmond, VA
Dissertation title: *The Role of Procedural Justice within Police-Citizen Contacts in Explaining Citizen Behavior and Other Outcomes*
- M.S. (2006) Criminal Justice, Virginia Commonwealth University, Richmond, VA
- B.S. (2005) Criminal Justice, Virginia Commonwealth University, Richmond, VA
- A.A.S. (2000) Law Enforcement, Central Texas College, Killeen, TX

CURRENT ACADEMIC APPOINTMENT

ADJUNCT INSTRUCTOR (2007 – present). Criminal Justice Department, L. Douglas Wilder School of Government & Public Affairs, Virginia Commonwealth University, Richmond, VA.

PROFESSIONAL EXPERIENCE

POLICY ANALYST (2012 – 2016). Office of the Chief of Police, Virginia Commonwealth University Police Department, Richmond, VA.

PROJECT MANAGEMENT ANALYST (2007 – 2012). Office of the Chief of Police, Richmond Police Department, Richmond, VA.

RESEARCH ANALYST (2005 – 2007). Major Crimes Division – Homicide and Aggravated Assault Units, Richmond Police Department, Richmond, VA.

GRADUATE ASSISTANT (2005 – 2007). Public Safety Institute, L. Douglas Wilder School of Government & Public Affairs, Virginia Commonwealth University

ACCREDITATION MANAGER (2005 – 2006). Caroline County Sheriff's Office, Bowling Green, VA.

ADVISORY BOARDS AND SPECIAL APPOINTMENTS

VCU Police Department Honors Board (2015 – 2016)
Great Place Initiative – Workplace Trust Committee (2013 – 2014)
Police Pursuit Review Committee (2013 – 2016)
VCU Police Department Recruitment Panel (Interviewer and Hiring Committee, 2012 – 2016)
VCU SACS Re-affirmation Committee (2012 – 2016)
VCU Compliance Advisory Committee (2012 – 2016)
VCU Clery Act Workgroup Committee (2012 – 2016)
VCU Police Department Policy Committee (Chair, 2012 – 2016)
VCU Police Department Training Committee (2012 – 2016)
VCU Police Department Promotions Committee (Chair, 2012 – 2016)
VCU Police Department Recruitment Panel (Hiring Committee Chair, 2012 – 2016)
Richmond Police Department Leadership Academy Committee (2011 – 2012)

EDITORIAL BOARDS

VCU Annual Security and Fire Safety Report (Editor, 2014 – 2016)
VCU Police Annual Report (Editor/Chair, 2012 – 2016)
Academy of Criminal Justice Sciences ACJS Today (Deputy Editor, 2006 – 2007)

HONORS AND AWARDS

Virginia Commonwealth University, Outstanding Achievement Award (2016)
Virginia Commonwealth University, Outstanding Achievement Award (2015)
Virginia Commonwealth University, Outstanding Achievement Award (2014)
Virginia Commonwealth University, Outstanding Achievement Award (2013)
Richmond Police Department, Certificate of Appreciation (2012)
L. Douglas Wilder School of Government & Public Affairs, Outstanding Graduate Student (2011)
Commission on Accreditation of Law Enforcement Agencies, Certificate of Appreciation (2010)
Rozanne Epps Undergraduate Scholarship Award (2004)

COURSES TAUGHT/CURRICULUM DEVELOPED

Virginia Commonwealth University (2007 – present) **L. Douglas Wilder School of Government & Public Affairs**

CRJS 181 Introduction to Criminal Justice
CRJS 254 Introduction to Policing
CRJS 302 Legal Writing
CRJS 305 Policing Theories and Practice
CRJS 355 Criminological Theory
CRJS 434 Police Administration
CRJS 480 Senior Seminar in Criminal Justice

Professional/Training Curriculum Developed & Taught

VCUPD Training Program – Practical Applications of Procedural Justice and Police Legitimacy
VCUPD Training Program – Preserving Digital Evidence
National Center for Campus Safety – Managing External Relations & Off Campus Conduct
VCUPD Training Program – Body Worn Cameras for Supervisors
VCUPD Training Program – Body Worn Cameras for Officers
VCUPD Training Program – Selling the Stop
VCUPD Training Program – Reducing Biased-Based Policing
IACLEA Annual Conference – Managing External Relations & Off Campus Conduct
VCUPD Training Program – Clery Act Compliance and Records Management
VCUPD New Supervisors Training – Policy for Supervisors
VCUPD Annual In-Service Training – Policy and Accreditation
VCUPD Training Program – Recognizing the Signs and Symptoms of Mental Illness
VCUPD Training Program – Ethics in Policing
VCUPD Field Training Officers School – Teaching the Adult Learner
VCUPD First Line Supervisors School – Significance of Law Enforcement Policy and Procedure
VCUPD Annual In-Service Training – Legal and Policy Updates
Richmond PD Division of Emergency Communications - Professional Communication
Richmond PD Leadership Academy – Written and Oral Communication
Richmond PD Leadership Academy – Ethics in Policing
Richmond PD Basic Recruit Academy – Community Policing and Sector Policing
VCU Public Safety Institute – Returning to School for the Adult Learner
VCU Public Safety Institute – Research Methods in Law Enforcement

PUBLICATIONS

Mell, S. (2016). “Female victimization by terrorist groups.” In *The Wiley-Blackwell Encyclopedia of Women and Crime*, ed. Frances Bernat & Kelly Frailing. Hoboken, NJ: Wiley-Blackwell. Forthcoming.

Cook, A.K., Mell, S. & Pelfrey, W.V. (2016). “Increasing Police Legitimacy Through Body-Worn Cameras.” In *Disproportionate Minority Contact: Current Issues and Policies*, ed. Nicolle Parsons-Pollard. Durham, NC: Carolina Academic Press. Forthcoming.

Mell, S. & Pelfrey, W.V. (2015). “Torture.” In *The SAGE Encyclopedia of Political Behavior*, ed. Fathali Moghaddam. Thousand Oaks, CA: Sage Publishers. Forthcoming.

Mell, S. & Pelfrey, W.V. (2015). “Political Crime.” In *The SAGE Encyclopedia of Political Behavior*, ed. Fathali Moghaddam. Thousand Oaks, CA: Sage Publishers. Forthcoming.

Mell, S. & Pelfrey, W.V. (2015). “Omniculturalism.” In *The SAGE Encyclopedia of Political Behavior*, ed. Fathali Moghaddam. Thousand Oaks, CA: Sage Publishers. Forthcoming.

Mell, S. (2007). Professional Profile: Chief Rodney Monroe. *ACJS Today*, 32(2), 4.

CONFERENCES AND PRESENTATIONS

VCU Assessment That Matters Board of Directors (2016): Formalizing Police-Citizen Encounters: Use of Body Worn Cameras to Assess Procedural Justice – Poster Session

VCU Assessment That Matters Board of Directors (2016): Formalizing Police-Citizen Encounters: Use of Body Worn Cameras to Assess Procedural Justice – Mid-Year Project Update

VCU Assessment That Matters Academy (2015): Formalizing Police-Citizen Encounters: Use of Body Worn Cameras to Assess Procedural Justice – Project Proposal

VCU Assessment Academy Team Members (2015): Use of Body Worn Cameras to Increase Police Legitimacy – Program Overview

International Association of Campus Law Enforcement Administrators (2014): Managing External Relations & Off Campus Conduct

VCU Psychology Anonymous Interdisciplinary Event (2012): Faculty Respondent – “A Clockwork Orange” from Psychological, Criminological and Cinematic Lenses

Southern Criminal Justice Association (2006): Roundtable – Public Safety Address to Handling Communication Interoperability: Local, State and Federal Law Enforcement Interoperability Efforts Pre- and Post- 9/11

Southern Criminal Justice Association (2006): Panel – Contemporary Juvenile Justice and Delinquency: An Assessment of Gang Resistance Education and Training (GREAT).

PROFESSIONAL AND COMMUNITY SERVICE

Member, VCU Assessment That Matters Academy – FY 2016 Annual Goals & Objectives Training Committee (2015 – 2016)

Member, VCU Great Place Initiative – Workplace Trust Committee (2013 – 2014)

Member, VCU Finance & Administration Training Committee (2012 – 2013)

Project coordinator & technical writer, Community Safety and Well-Being cabinet of the Mayor Dwight Jones’ Focus Areas for the Balanced Scorecard Budget Initiative (2011- 2012)

RPD representative, City of Richmond legislative team to review all proposed legislation for feedback on behalf of the department and representation for proposed legislation at the General Assembly (2011 – 2012)

Richmond Police Department Leadership Academy Steering Committee (2011 – 2012)