<u>UNDERSTANDING CITIZEN PERCEPTIONS: HOW POLICE BEHAVIOR AND COMMUNITY INFLUENCE RESIDENT SATISFACTION WITH POLICE</u>

by

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DEDICATION

I dedicate this thesis to my entire family, friends, and mentors. Without you, this would not be possible.

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I would like to express my deepest gratitude to Professor Gill, Professor Yang, and Professor Houston for their patient guidance, useful critiques, and kind words. I would also like to thank Dr. Willis for constantly fueling my passion, making me question the validity of my own thoughts, and teaching me to think more freely.

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ABSTRACT

UNDERSTANDING CITIZEN PERCEPTIONS: HOW POLICE BEHAVIOR AND

COMMUNITY INFLUENCE RESIDENT SATISFACTION WITH POLICE

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The way that law enforcement interacts with residents has been at the forefront of

media scrutiny. The police, or street level bureaucrats, are often the most visible

representation of a community and are afforded a plethora of discretion (Lipsky, 1980).

However, their exercise of said discretion, or police behavior, varies greatly from one

area to another. Gaining insight into how the police conduct their business is essential to

better understand their roles as law enforcement officers in a particular area. Similarly, an

effective police department relies on the assistance of active residents to help secure and

regulate a community (Sargeant, 2017). Compliance and cooperation of residents

depends upon how satisfied they may be with their local police.

The primary focus of this study is to better understand how specific individual-

level variables relating to police behavior and community are associated with satisfaction

with police and their services in Roanoke County, Virginia. While prior research has

focused primarily on urban or suburban settings to explore community-police relations, I quantitatively analyze survey data from a unique suburban-rural setting to better explain how contact with authorities, procedural justice, and community context (specifically, collective efficacy, perception of neighborhood conditions, and residential stability) is associated with citizen satisfaction with local police and police services. Given the current social and political climate, there is severe strain on police-community relations. However, effective communication between the police and the citizens they serve can curb resentment and increase legitimacy. This mutually beneficial partnership can help address community concerns, assess police performance, and outline future needs that should be addressed.

CHAPTER ONE: INTRODUCTION

In the last few decades, the police have been at the forefront of media scrutiny as a direct result of negative interactions with the public. The police, or street level bureaucrats, are often the most visible representation of a community and are afforded a plethora of discretion (Lipsky, 1980). However, the exercise of said discretion has sparked interest in how the public perceives the police. The lack of uniformity in police decision-making has led to frustrations between the police and the constituents they serve, bringing into question the specific determinants of citizen satisfaction with police and their services.

While some scholars argue that the quality and frequency of contacts with the police can have a significant impact on citizen satisfaction with police (Alberton and Gorey, 2018; Gau, 2011; Ren et al., 2005; Skogan, 2006; Wells, 2007; Correia, Reisig, and Lovrich, 1996), Paul Rozin and Edward Royzman's (2001) negativity bias principle explains that most negative encounters are more salient and potent than positive ones. Likewise, Skogan's (2006) subsequent research showcases asymmetry in the impact of police encounters, as negative interactions do not always balance out positive ones. On the other hand, Schafer et al. (2003) explain that both voluntary and involuntary contacts with police yield reduced satisfaction with police and traditional police services – all contact yields negative perceptions. To put it simply, any interaction with law

enforcement leads to reduced satisfaction with police. It is possible that any encounter with law enforcement amplifies the nature of policing, which can sometimes be coercive, and as a result, impacts public opinion on satisfaction with the police.

These perceptions and encounters also have the potential to be significantly impacted by discretion, or police behavior, which can vary greatly from one area to another. According to Sargeant (2017), when residents are more satisfied with the police, they are more likely to be cognizant and active in addressing crime problems. However, their satisfaction is directly tied to police behavior. Tyler's process-based model, or procedural justice, advocates for four specific principles: (1) criminal justice actors are fair in the process, (2) criminal justice actors are transparent in their decisions and actions, (3) criminal justice actors provide individuals with an opportunity for voice, and (4) criminal justice actors are impartial in their decision-making (Tyler and Huo, 2002). In this way, as Sunshine and Tyler (2003) argue, the manner with which authorities carry out their duties plays an important role in securing compliance and legitimacy, which in turn, may be associated with citizen satisfaction with police.

However, the securitization and regulation of a community is not the sole responsibility of the police. Rather, the health of a neighborhood depends on active community members that regularly report crimes to the police, oversee neighbors' properties, and are willing to mediate, should the need arise (Sargeant, 2017). Collective efficacy refers to the concept of social cohesion combined with the ability to intervene (Sampson, Raudenbush, and Earls, 1997). Grown out of the social disorganization framework (Shaw and McKay, 1969; Kornhauser, 1978; Sampson and Groves, 1989),

collective efficacy aims to explain criminality through the lens of an individual's local context or neighborhood, rather than focusing on the background or behavior of people who commit crimes. Another aspect of social disorganization theory is residential (in)stability (Shaw and McKay, 1942). Although this aspect is usually characterized by the length of stay within a neighborhood (Lee et al., 2019), a number of studies have used homeownership as a proxy for understanding residential stability (Reisig and Parks, 2000; Nofziger and Williams, 2005; Rhineberger-Dunn and Carlson, 2009). In each of these studies (Reisig and Parks, 2000; Nofziger and Williams, 2005; Rhineberger-Dunn and Carlson, 2009), the authors suggest that homeowners tend to be more satisfied with the police as opposed to renters.

Perception of neighborhood conditions is another element that has the ability to impact citizen satisfaction with the police. Schafer et al. (2015) report that the actual crime rate is not a good indication of assessing citizen satisfaction with police and police services. Rather, Ross and Jang (2000) assert that communities plagued with more disorder tend to report less trust of neighbors, increased levels of fear, and perceive their neighborhoods more negatively. As such, the idea is that neighborhoods high in collective efficacy, residential stability, and positive perceptions of neighborhood conditions tend to be safer and create an orderly environment in which residents can thrive. A prosperous community with active citizens allows for a successful police force to take action in conjunction with a cooperative neighborhood.

By that logic, gaining insight into how the police conduct their business and how a community perceives such conduct is essential to better understand their roles as law

enforcement officers in a particular area. However, a majority of the existing studies focus on urban or suburban settings, leaving rural and unique suburban-rural areas understudied. The dynamics of a rural area are vastly different than other types of communities. Although some research studies have confirmed that crime in rural areas is less frequent compared to their urban counterparts, there has been relatively little attention paid to the dynamics of police behavior and community context. Hollis and Hankhouse (2019) explain that neglect of rural communities means 97% of the country's land area and about 19.3% of the population is ignored in American criminology. This is a major problem since variations in police behavior may be based on location, which in turn, can impact the level of satisfaction with police and their services.

Using survey data collected from a community survey conducted by Roanoke County Police Department (RCPD), in collaboration with the Center for Evidence-Based Crime Policy (CEBCP) at George Mason University, this study explores how contact with law enforcement, procedural justice, and community context are associated with citizen satisfaction with police and police services in Roanoke County, a semi-rural jurisdiction in Virginia. This study not only contributes to existing literature on police-community relations in suburban-rural areas, but also aims to improve police-community partnerships at the study site. Given the current social and political climate, any strain on police-community relations can hamper order and prevent authorities from providing effective service (Schafer et al., 2003). However, effective communication between the police and the citizens they serve can curb resentment and increase legitimacy. This mutually beneficial partnership can help address community concerns, gauge

effectiveness of the department, and outline future needs that should be addressed. Thus, results from this research may be used for translational purposes to create departmental or local policy and practice shifts.

CHAPTER TWO: LITERATURE REVIEW

Citizen Satisfaction with Police

Researchers and policy makers all across the nation have come to the consensus that securing public support for the police is undeniably a necessity for successful policing. Such support not only legitimizes the department but is a prerequisite for later enlisting the help of the public to reduce crime (Sargeant, 2017). However, public support is contingent upon how fairly and professionally the public perceives the police to treat those that they are tasked to serve and protect. In the 1960s, police agencies traditionally relied on their crime fighting capabilities to demonstrate effectiveness, which proved to be largely unsuccessful in bringing down crime rates (Ren et al., 2005). As a result, the police had to look for new ways to engage the public, as the concept of community policing altered the way police performance would be measured (Ren et al., 2005). In an effort to improve police-community relations, the 1980s saw a plethora of new programs such as youth mentorship and neighborhood watch, as well as new standards to evaluate police behavior (Ren et al., 2005). Since then, citizen satisfaction has become one of the key ways that departments look to assess their overall agency performance.

Although a number of studies in the past have looked at citizen satisfaction with police, their conceptualizations all vary. Generally, citizen satisfaction with the police can be defined as how content an individual may be with the behavior and actions of their

local police department and is usually dependent upon a number of factors (Reisig & Parks, 2000). Early studies focused heavily on demographic factors such as race, gender, or socioeconomic status (Ren et al., 2005). Typically, white respondents tend to be more satisfied with police and their services (Cao et al., 1996; Nofziger & Williams, 2005; Ren et al., 2005). Also, there is generally a positive relationship between gender and satisfaction with police and police services (Cao et al., 1996; Hinds, 2009), with females being more satisfied than their male counterparts. Likewise, prior research has found that individuals who are older tend to be more satisfied with police and traditional police services (Cao et al., 1996; Ren et al., 2015; Circo et al., 2019; Rhineberger-Dunn and Carlson, 2009; Reisig and Parks, 2000; Sargeant, 2017; Hinds, 2009). However, scholars have found mixed results pertaining to both income and education's association with police and police services (Antrobus et al., 2015; Lee et al., 2020; Cao et al., 1996; Rhineberger-Dunn and Carlson, 2009; Hinds, 2009). The demographic factors are able to explain some of the variation in satisfaction with police and thus, it is important to incorporate them as controls whilst studying other sources of satisfaction with police.

Policing scholars have paid particular attention to three determinants of citizen satisfaction with police: experience with police, which is based on any contact an individual has had with police; perceived quality of life, which states that an individual's local neighborhood influences satisfaction; and the neighborhood context, often relating to macro-level conditions such as crime or poverty (Reisig & Parks, 2000; 2003).

Although Reisig and Parks (2000) found that both perceived quality of life and personal experience are important predictors of satisfaction, it is important to observe how

variations in location influence satisfaction with police. As such, this study uses individual-level survey data to understand how contact with law enforcement, procedural justice, and community context are associated with citizen satisfaction with police in a suburban-rural setting.

Contact with Law Enforcement

The quality and frequency of contacts with the police can have a significant impact on citizen satisfaction with police (Alberton and Gorey, 2018; Gau, 2011; Ren et al., 2005; Skogan, 2006; Wells, 2007; Correia, Reisig, and Lovrich, 1996). Research by Skogan (2006) shows that there is asymmetry in the impact of police encounters. Skogan (2006) analyzed survey data on police- and citizen-initiated contacts with police in Chicago and found that the effect on satisfaction of a negative experience in a citizen-initiated contact was 23 times that of having a positive experience, whereas the effect of a negative police-initiated contact was 4 times that of a positive one, implying that negative experiences lead to much lower satisfaction than positive experiences lead to higher levels of satisfaction. He explains that:

"Several studies of police encounters with the public have noted that the relationship between how people are treated and their general confidence in the police may be asymmetrical, rather than balanced. Good days may not balance out bad days. At its worst, the police may get essentially no credit for doing a good job, while a bad experience deeply influences people's views of their performance and even legitimacy" (Skogan, 2006, p. 100).

Ensuring a positive interaction is vital, as Paul Rozin and Edward Royzman's (2001) negativity bias principle explains: "in most situations, negative events are more salient, potent, dominant in combinations, and generally efficacious than positive events" (p. 297). Due to the fluidity of police-citizen contacts, it is imperative to understand how to limit negative encounters in an effort to improve police-community relations, as these instances tend to have long-lasting and detrimental effects.

Additionally, Skogan (2006) replicated his study in Chicago and extended the study procedures in other American cities (Seattle, Washington, DC), as well as the Russian Federation and found similar results. He concluded that both police- and citizeninitiated contacts show strong asymmetry. However, citizen-initiated contacts were characterized with stronger asymmetry than police-initiated encounters (Skogan, 2006). Similarly, Schafer et al. (2003) found that both voluntary and involuntary contacts with police yield reduced satisfaction with police and traditional police services – all contact leads to negative perceptions. In a UK-based study, Bradford, Jackson, and Stanko (2009) found that satisfactory contact has the ability to improve already favorable opinions but has minimal impact on more neutral or negative opinions. Also, Li et al. (2016) found that negative police-citizen encounters lead to less favorable ratings of the police, regardless of who initiated the contact. Moreover, they found that the impact of negative contacts was about three times the impact of a positive contact, alluding to the salience of negative encounters over positive ones (Rozin & Royzman, 2001). By contrast, Hinds (2009) indicated that having any positive contact with police, whether voluntary or involuntary, leads to higher rates of satisfaction. However, these results are only

generalizable to larger metropolitan cities. Nofziger and Williams (2005) argued that the quality of contacts is especially important in smaller, more rural settings where kin-based ties are heavily valued. Gaining insight to how citizens perceive experiences with the police has important implications for their overall satisfaction with police and police services.

However, it is not simply about the quality, but also the quantity of contact between police and the citizens they serve. According to Correia et al. (1996), as the number of police-citizen contacts increases, levels of satisfaction with the police decrease. Other studies have shown a link between frequency of contact and citizen level of satisfaction with police (Lee et al., 2019; Alberton and Gorey, 2018). According to Lee et al. (2019), residents who rated contact with the police as satisfactory reported higher levels of trust in the police. However, individuals who had more than two encounters with police reported lower levels of trust as opposed to those with less contacts. Likewise, Alberton and Gorey (2018) carried out a meta-analysis and found that contact with police is a more robust predictor of attitudes toward the police than race.

On the other hand, Reisig and Parks (2000) found that individuals who are satisfied with either a call for service or traffic stop indicate more satisfaction with the police than residents who had no prior contact, implying that improving the quality of service during specific encounters can significantly boost overall satisfaction with police. Using a dichotomous variable (dissatisfaction/satisfaction), those who rated their encounter as unsatisfactory are significantly less satisfied with the police overall than individuals with no similar contact (Reisig & Parks, 2000). According to Mastrofski et al.

(2016), individuals tend to rate traffic encounters more favorably due to the fact that they occur much more frequently than other types of contact and often come with much lower stakes (i.e. noncriminal offense).

Additionally, Bradford et al. (2009) found that although negatively rated encounters with the police had strong adverse associations, positively rated self-initiated contacts led to small but significant improvements in opinion. By contrast, Ren et al. (2005) found a relationship in the opposite direction between frequency of contacts and confidence in the police. They reported that the number of police-citizen contacts was positively associated with higher levels of confidence in the police. Each of these studies (Reisig & Parks, 2000; Mastrofski et al., 2016; Bradford et al., 2009; Ren et al., 2005) used similar key demographics for comparison purposes including items such as race, age, gender, and socioeconomic status but were carried out in various locations.

Uncovering the relationship between frequency of contacts and satisfaction with the police is even more important in a rural area, given that residents have the likelihood of potentially running into the same officers.

Furthermore, although residents tend to have mixed feelings about police and police services, having contact with the police as a result of crime victimization appears to have a clearer relationship with citizen satisfaction. More specifically, victims tend to rate the police much lower in both confidence and satisfaction (Cao et al., 1996; Ren et al., 2015; Circo et al., 2019; Wells, 2007). Cao et al. (1996) and Ren et al. (2015) both found that victimization experiences significantly reduce confidence in the police.

Similarly, Circo et al. (2019) indicated that there is an inverse relationship between fear

of victimization and satisfaction with police. Specifically, they found that household and violent victimization both lead to significant decreases in satisfaction with police, with violent victimizations having a stronger impact. More importantly, Wells (2007) found that victims rate officers much more favorably when they act with professionalism, make victims feel safe, offer referrals to other agencies, and re-contact them as promised. However, failure to partake in those outcome-oriented behaviors led to lower satisfaction with police. As first responders, law enforcement have an obligation to aid those in need and such contact with residents has the potential to increase overall satisfaction with police.

Procedural Justice

In recent years, Tom Tyler's process-based model has received a lot of attention from practitioners and researchers alike (Tyler and Huo, 2002; Sunshine and Tyler, 2003; Tyler, 2005; Gau, 2011) and rightfully so. Every encounter that a citizen has with an authority figure puts the person in a position to evaluate the quality of decision-making and treatment they receive during the encounter. Tyler's process-based model, or procedural justice, is based on four specific principles: (1) criminal justice actors are fair in the process, (2) criminal justice actors are transparent in their decisions and actions, (3) criminal justice actors provide individuals with an opportunity for voice, and (4) criminal justice actors are impartial in their decision-making (Tyler and Huo, 2002). According to Sunshine and Tyler (2003):

"Process-based regulation seeks to manage the relationship between legal authorities and the communities they police through self-regulation that flows

from the activation of people's own feelings of responsibility and obligation to the community and to community authorities. These social values – i.e., legitimacy – are, in turn, linked to public assessments of the fairness of the manner in which authorities exercise their discretionary authority when implementing the law and/or making decisions about whether and how to provide assistance to those in need" (p. 515).

Sunshine and Tyler (2003) argue that the manner with which authorities carry out their duties plays an important role in securing compliance and legitimacy, which in turn, may be associated with citizen satisfaction with police. According to the authors, procedural justice, followed by performance evaluations and distributive justice judgments, has one of the strongest impacts on legitimacy. Tyler (2005) found that perceived police fairness has one of the strongest impacts on the public's level of trust in the police. Evidently, in order for a police agency to effectively perform their duties, it is imperative that they act in a procedurally just manner. This not only affords more legitimacy to the department but has the ability to secure compliance and assistance from the community they serve. For example, Gau (2011) empirically tested some of the core theoretical components of procedural justice and found that procedural justice is one of the predictors of obligation to obey, which is extremely associated with cooperation and compliance. According to Antrobus et al. (2015), individuals who find the police to be procedurally just are more likely to feel a moral duty to obey their commands, lending support to the idea that procedural justice is important for solidifying legitimacy.

Similarly, Hinds (2009) found that citizen satisfaction with police is highly dependent upon police legitimacy, performance, and procedural justice.

However, more recently, Nagin and Telep (2017) argue that although perception-based studies consistently find that perceptions of procedurally just treatment are related to perceptions of police legitimacy, they have been unable to establish whether there is a causal connection between the two. They believe that associations between procedural justice and legitimacy/compliance may be attributed to other external factors such as community effects or norm neutralization (Nagin & Telep, 2017). The authors also assert that there is limited research that has been able to test the idea of procedurally just treatment by police through training or experimental manipulation. In agreement with Nagin and Telep (2017), Tyler (2017) states police agencies are not as receptive to using new methods to assess variations in procedural justice as they are to testing other strategies. However, disentangling procedural justice and legitimacy is beyond the scope of the current research study. Rather, it is important to be mindful of the limitations of concepts such as procedural justice.

Nonetheless, other studies have found support for Tyler's process-based model (Nix et al., 2015; Wells, 2007; Reisig et al., 2018). According to Nix et al. (2015), perceived procedural justice is positively associated with greater trust in the local department. Likewise, Wells (2007) found that fair treatment and professionalism on the part of the officer affords local police better evaluations. Consistent with Tyler's work, Wells (2007) also found that the procedural justice elements have the strongest impact upon citizens evaluation of officer performance. In a more recent study, using a factorial

vignette design, Reisig et al. (2018) found that participants who are treated in a procedurally unjust manner report less satisfaction with officer performance and are more likely to wish that officers had handled the situation differently, lending further support to Tyler's process-based model.

Moreover, Sunshine and Tyler (2003) argue that, "evaluations of legitimacy are based on procedural fairness more so than on judgments about distributive fairness or other instrumental indicators" (p. 524). However, other studies have found that distributive justice – or outcomes – tend to play a role in people's evaluation of the police as well (Wells, 2007; Reisig et al., 2018; McLean, 2019). For instance, while Wells (2007) found that both perceived procedural justice and distributive justice are associated with higher level of satisfaction with the police, he notes that the procedural justice variable had a slightly stronger effect on favorable citizen evaluations of the police. In a more recent experiment, Reisig et al. (2018) found that it is possible that the processbased model underestimates the importance of outcomes, as participants in their sample paid close attention to the end result of the encounter. Similarly, using a factorial vignette design, McLean (2019) found that individuals in their sample shaped their judgments about distributive justice based on changes to an officer's adherence to procedural justice principles rather than by changes in the outcome they received. This implies that procedural justice may be a predictor of distributive justice.

Nonetheless, it is possible that personal factors (i.e. role of the individual) may have the potential to dictate how pertinent procedural justice is. For example, Wells (2007) highlighted that their results for the effects of procedural justice on crime victims

are more inconsistent than other type of contacts. He explained that crime victims in his sample place more emphasis on distributive justice than they did on the actual process. However, there are other factors that could influence the importance of procedural justice. For example, Antrobus et al. (2015) found that individuals are significantly more concerned about the way the police treat them when they feel others in their community see the police as less legitimate. This implies that procedural justice seems to be associated with not only the role of an individual but also with community norms. More importantly, Antrobus et al. (2015) stated that procedural justice is associated with "belongingness" as well and individuals who participate in more community groups place relatively less importance upon procedural justice. These findings allude to the importance of community on procedural justice.

Mastrofski, Jonathan-Zamir, Moyal, and Willis (2016) conducted a study to predict procedural justice in police-citizen encounters using data from two different police departments. Their claim was that subjective moral judgments in particular encounters have the ability to determine the type of treatment an individual will receive. Mastrofski et al. (2016) found that:

"Officers are more likely to provide PJ [procedural justice] to citizens perceived to be "deserving" because they are victims, helpless, or service-recipients, ... or because they requested police involvement. Officers are less likely to display PJ [procedural justice] when the situation becomes more challenging because there are more citizens on scene, and because they have already handled more encounters until the present" (p. 130).

Also, they found that officers are more likely to act in a procedurally just manner in traffic encounters as opposed to in a back-up role, since the stakes of a traffic stop are significantly lower (Mastrofski et al., 2016).

Because procedural justice can vary greatly in different type of contexts, gaining insight about its role in a more rural area is increasingly important as the world becomes more interconnected, making interactions with authorities more likely. The tone of these encounters has the ability to vastly affect citizen satisfaction, compliance, and police legitimacy. For instance, Nofziger and Williams (2005) found that the quality of contact is especially important in smaller communities, as encounters with the police are more salient in settings where informal ties are stronger. The social familiarity in suburbanrural settings can be attributed to the relative stability of the local population. Citizens of rural areas tend to change addresses less frequently, often saying in a specific locale for generations (Auletta, 1982).

Community Context

This study utilizes three specific elements of social disorganization theory: collective efficacy, perception of neighborhood conditions, and residential (in)stability. The social disorganization framework came out of the Chicago School, eventually producing decades of research on crime using ecological analysis (Shaw and McKay, 1942 [1969]). This ideal aims to explain how social forces such as poverty, inequality, subcultures, and formal and informal social control interact (Shaw and McKay, 1942 [1969]; Kornhauser, 1978; Sampson and Groves, 1989). In this way, criminality is seen through the lens of an individual's local context or neighborhood rather than focusing on

the background and behavior of people who commit crime. Using spatial maps, Shaw and McKay (1942 [1969]) were able to successfully demonstrate that crime is not dispersed evenly across the city of Chicago but is rather concentrated in disadvantaged neighborhoods. According to Shaw and McKay (1942 [1969]), these neighborhoods, or Zones of Transition (Park et al., 1928), had at least three characteristics that aid their social and economic plague and lead to high crime rates. Specifically, these Zones of Transition were home to decaying physical conditions and neighborhoods are marked by disorder and residential instability. Secondly, these areas were economically deprived and had the lowest socioeconomic status. The population composition of the neighborhoods incorporated large numbers of foreign-born and African American heads of families, leading to ethnic and racial heterogeneity. Due to constant population turnover, conventional forms of social control in these Zones of Transition were weak, often leading to criminogenic conditions for the children residing in these neighborhoods (Shaw and McKay, 1942 [1969]). As a result, this led to a lot of conflict between individuals, rendering them unable to establish positive relations with one another and leaving behind a subculture of delinquency that remained long after the residents left.

Despite Shaw and McKay's compelling ecological analysis, Kornhauser noticed some gaps in the order of social disorganization theory. Kornhauser's (1978) criticism of Shaw and McKay was that she believed their theory contained two separate arguments:

(1) the social disorganization argument that crime emerges in neighborhoods where neighborhood relationships and institutions have broken down and cannot maintain effective social controls and (2) the subcultural argument that delinquent behaviors come

to be supported by shared values and norms of neighborhood residents over time. Although Shaw and McKay had concluded that the second argument is more important than the first, Kornhauser (1978) argued that this is illogical because disorganized neighborhoods will have crime regardless of having delinquent subcultures, but delinquent subcultures cannot exist without crime caused by social disorganization. Therefore, social disorganization is the primary cause of crime, rather than delinquent subcultures. Kornhauser (1978) was successfully able to differentiate between social disorganization and its outcome: crime.

Social disorganization theory saw another revitalization with the introduction of the concept of collective efficacy (Sampson and Groves, 1989; Sampson et al., 1997). Collective efficacy refers to social cohesion combined with informal social control (Sampson et al., 1997). The first aspect, social cohesion, refers to the shared values and norms of residents within a particular neighborhood or community whereas informal social control refers to the ability and willingness to intervene in local problems (Sampson et al., 1997). Sampson et al. (1997) redefined social disorganization as the inability of a community to realize its common values. Whereas prior research had focused primarily on macro-level factors (i.e. residential stability, ethnic and racial heterogeneity), this renewed interest in social disorganization theory focused heavily on group and individual dynamics within neighborhoods. Sampson et al. (1997) proposed social disorganization in a more consecutive manner and stated that poverty, family disruption, and high residential mobility are all characteristics that result in anonymity, leading to a lack of social relationships among neighborhood residents and low

participation in community organizations and local activities. Due to low social capital/collective efficacy, neighbors cannot exert effective control over public or common areas (i.e. streets, parks, etc.) so these areas then tend to be taken over by people engaging in deviant behavior (Sampson et al., 1997). Sampson (1989) further explained that local youth in a neighborhood tend to have a lot of freedom due to anonymity, which means that most youth are unknown to adults even though they live in close proximity. Therefore, this anonymity results in increased crime and violence in the neighborhood, independent of the people who live there.

In support of Sampson et al. (1997), Jackson and Sunshine (2007) suggest that a neighborhood's social cohesion, which is one aspect of collective efficacy, is tied to evaluations of the police. Cao, Frank, and Cullen (1996) suggest that confidence in neighbors may elicit feelings of confidence that their local police are there to provide protection, implying that collective efficacy encourages broader feelings of security.

Others (Ren, Cao, Lovrich, and Gaffney, 2015; Circo, Melde, and Mcgarrell, 2019; Li, Ren, and Luo, 2016; Sargeant, 2017) have found support for this assertion as well. Ren et al. (2015) suggested that respondents who express more confidence in their neighbors tend to show more confidence about the police. Likewise, in a more recent study, Circo et al. (2019) found that both community satisfaction and collective efficacy are positively associated with satisfaction with local police. Li et al.'s (2016) study indicated that citizen evaluation of police is tied into neighborhood variables such as collective efficacy. Similarly, Sargeant (2017) stated that, "individuals perceptions of trust in police effectiveness and trust in procedural justice in their neighbourhood are strongly

associated with beliefs about neighbourhood collective efficacy" (p. 935), lending further support to the concept of collective efficacy.

Additionally, Zhao and Ren (2015) argued that neighborhood context-specific survey questions often yield answers that showcase how a neighborhood can be a moderator in assessing public attitudes toward police. In fact, psychologist Robert Cialdini (2001) claims that individuals use the actions of others to decide on the most effective behavior for themselves. He explains that people are more likely to behave a certain way if others have also partaken in similar actions. Reisig and Parks (2000) carried out a hierarchical analysis of satisfaction with police and find that "cognitive and emotionally-based responses to neighborhood conditions appeared to be the most important determinants of individual attitudes toward police" (p. 625). Similarly, a UK-based study conducted by Bradford et al., (2009) found that community cohesion is extremely important in determining confidence in the local police department and that such cohesion is especially important in gauging fairness and engagement of the police rather than their effectiveness. Given these arguments, it appears that cognition and sense of community are prerequisites for elements of collective efficacy.

However, social cohesion is just one part of collective efficacy, with the other being informal social control (Sampson et al., 1997). Nix, Wolfe, Rojek, and Kaminski (2015) found not only that an individual's orientation to perceived neighborhood conditions played a large role in their level of trust in the police, but also that those who bought into the idea of collective efficacy are more likely to view the local police as being procedurally fair. In fact, Schafer et al., (2003) found support for both of these

assertions. They found that persons with a more positive view of their community and those who report that their neighbors would be willing to intervene and take responsibility for neighborhood safety are more likely to report satisfaction with police and community-police relations (Schafer et al., 2003). Not only does collective efficacy have the potential to increase citizen satisfaction with police, it may even encourage them to view the police as more legitimate, thereby giving the police greater deference. In an Australian-based study, Antrobus, Bradford, Murphy, and Sargeant (2015) found that community norms that regard the police as legitimate are associated with a greater obligation to obey the police. They also discovered that individuals who belong to more community groups tend to give police greater deference as well (Antrobus et al., 2015), confirming that people's attitudes, ideas, and behaviors are heavily influenced by others around them (Cialdini, 2001).

However, a majority of the work conducted and reviewed above using social disorganization theory has been done in an urban or suburban setting. The norms, values, and organization of rural communities differ substantially from their urban and suburban counterparts. According to Antrobus et al. (2015):

"Theory and research suggest that community-level processes and norms relating to police may influence individuals' perceptions of police legitimacy and feelings of obligation to follow their directives and rules: Peoples' attitudes and behaviors are shaped by the social contexts in which they live" (p. 4).

In fact, rural communities may be even more susceptible to certain norms and attitudes, as these communities tend to be ethnically homogenous and socially integrated.

Likewise, there have been a number of studies that showcase how rural communities utilize kin-based social networks, the dynamic of these relationships, and how they differ from their urban counterparts (Fischer, 1982; Amato, 1993). It appears that how individuals view the police is highly dependent upon their location.

In particular, three studies (Osgood and Chambers, 2000; Kaylen and Pridemore, 2011; Holmes, Painter, and Smith, 2017) have applied social disorganization theory to understand crime and crime rates in rural areas. In line with the work done in urban areas using social disorganization theory, Osgood and Chambers (2000) found that juvenile violence is associated with residential instability, family disruption, and ethnic heterogeneity but find no connection to rates of poverty using arrest data from 264 nonmetropolitan counties in four states. On the other hand, Kaylen and Pridemore (2011) used the same measures of social disorganization as Osgood and Chambers but find that only the proportion of female-headed households is associated with rural youth violent victimization rates in Missouri counties. The difference in the two studies may be attributed to methodological issues or may simply not be as readily generalizable from one rural area to another. More recently, Holmes et al. (2017) aimed to understand citizen perceptions of police in rural settings using social disorganization factors. They found that social integration is positively associated with ratings of police protection and trust and that such integration also moderates the effects of social disorganization on citizens' trust in police (Holmes et al., 2017).

On the other hand, perception of neighborhood conditions is another element of community that has the ability to impact citizen satisfaction with the police. In their

study, Schafer et al. (2003) reported that the actual crime rate did not seem to matter as much as citizens' own assessments of their neighborhoods and potential crime problems in determining perceptions of police and police services. Ross and Jang (2000) found that communities plagued with more disorder tend to report less trust of neighbors and increased levels of fear. There have been a number of studies (Schafer et al., 2003; Cao et al., 1996; Circo et al., 2019; Reisig and Parks, 2000; 2003; Nofziger and Williams, 2005) that have been able to establish the link between incivilities in a particular neighborhood and satisfaction with the police. For example, Schafer et al. (2003) found that citizens who indicate major crime problems in their neighborhoods tend to have very negative perceptions of their local police. Likewise, Cao et al. (1996) explained that as citizen perceptions of disorder increases, their confidence in the police decreases. Reisig and Parks (2000) demonstrated that citizens who perceive incivilities report lower levels of satisfaction with police than their counterparts who do not perceive such incivilities. They also reported that citizens' personal feelings about their neighborhoods are a significant predictor in assessing satisfaction with the police (Reisig and Parks, 2000), thereby confirming that an individual's cognitive orientations play an important role (Cialdini, 2001).

Likewise, Nofziger and Williams (2005) found that respondents who believe that there is less crime than a year ago report higher levels of satisfaction with the police. In a subsequent study, Reisig and Parks (2003) confirmed that citizens living in disadvantaged neighborhoods rate police service more negatively. However, they did explain that citizens who observe police officers on foot or bike, rather than automobile, rate police

higher in service and overall satisfaction (Reisig and Parks, 2003). Similarly, Circo et al. (2019) found that as community policing efforts reduce disorder in neighborhoods, citizens begin to report less fear of crime and higher satisfaction with police. Further, Reisig and Cancino (2004) argued that conditions of trust and solidarity in a neighborhood have the potential to reduce such incivilities, once again confirming the importance of collective efficacy.

Furthermore, another aspect of social disorganization theory is residential (in)stability (Shaw and McKay, 1942 [1969]). According to Lee et al. (2020), residential stability is usually characterized by the length of stay within a neighborhood but can be influenced by a number of elements such as poverty, ethnic or racial heterogeneity, and collective efficacy. There have been a number of studies that have attempted to establish the link between residential stability and satisfaction with the police (Reisig and Parks, 2000; Nofziger and Williams, 2005; Rhineberger-Dunn and Carlson, 2009). In the Reisig and Parks (2000) study, the authors stated that homeowners tend to be more satisfied with the police as opposed to renters. Similarly, Nofziger and Williams (2005) claimed that those who own their homes have higher levels of confidence in the police than those who rent.

Using factor analysis, Rhineberger-Dunn and Carlson (2009) found that residential stability (defined as years lived in the neighborhood, number of times moved in the past five years, and homeownership) is highly and positively associated with social cohesion and informal social control (i.e. collective efficacy). They explained that more stable neighborhoods yield higher levels of collective efficacy (Rhineberger-Dunn and

Carlson, 2009). On the other hand, Lee et al. (2020) found that individuals who stay longer in a particular neighborhood tend to trust the police less. Further, their results illustrated that individuals who stay in a duplex or a condo have higher levels of trust than those in other living arrangements such as mobile homes (Lee et al., 2020). They noted that there is no significant variation for other living arrangements such as apartments or single-family homes. It is possible that their results are context-specific to their study site. However, understanding the link between residential stability and satisfaction with the police is imperative in this fast-paced world.

CHAPTER THREE: THE PRESENT STUDY

The primary focus of this study is to better understand how specific individual-level variables relating to community and police behavior are associated with satisfaction with police and police services. Specifically, this study uses information on community context, procedural justice, and contact with police to examine citizen satisfaction with police and police services in Roanoke County, a suburban-rural jurisdiction in Southwestern Virginia. The outcome variable is citizen satisfaction with police and police services. The three main independent variables that I utilize include contact with the police, procedural justice, and a composite measure of community context (specifically, collective efficacy, perception of neighborhood conditions, and residential stability).

While prior research has focused primarily on urban or suburban settings to explore community-police relations, I use survey information from a unique suburbanrural setting to better explain how contact with authorities, procedural justice, and community context is associated with citizen satisfaction with local police and their services. The lack of research on perception of police and their services in nonurban areas ignores about 19.3% of the American population (Hollis & Hankhouse, 2019). The experience of crime and perceptions about the police are substantially different in a nonurban area compared to their urban counterparts. Urban areas tend to be characterized by poor relations between the police and the constituents they serve and are often marked

by a plethora of social problems such as poverty, structural disadvantage, or high crime rates (Holmes et al., 2017). However, police work in a rural area usually involves handling cases related to animals, public intoxication, peace disruption, and interpersonal conflicts (Payne et al., 2005). Holmes et al. (2017) maintain that departments in rural areas interact with their citizens using an informal style of communication and are "deeply embedded in tightly knit community relations" (pp. 139). As a result, the perceptions of their local police are vastly different and merit studies specific to each locale.

The current research study aims to evaluate how well certain concepts and theories perform across an understudied area such as rural or uniquely suburban-rural settings. The reliance on kin-based networks in such areas (Fischer, 1982) may influence the type, quality, and frequency of contact that residents have with their local police. The way that police agencies handle these interactions can set the tone for how satisfied residents may be with their local department. Although the concept of procedural justice tends to hold up strongly in metropolitan areas (Gau, 2011; Nix et al., 2015; Reisig et al., 2018; Sunshine and Tyler, 2003), there has been considerably much less attention paid to nonmetropolitan areas. Similarly, one of the most rigorous evaluations of social disorganization theory in a rural setting was conducted using juvenile arrest rates by (Osgood & Chambers, 2000) who assert that elements from the theory "generalize well to rural communities" (pp. 100). However, there has been little attention paid to how aspects of procedural justice and social disorganization theory impact perceptions of satisfaction in a rural area. The current study looks to address such a void in the literature by

examining the influence of contact with authorities, procedural justice, and community context on citizen perception of local police and their services in Roanoke County, VA.

Uncovering the depth and breadth of such relations between police and citizens is more relevant now in the wake of current events, given there is severe strain on police-community relations, bringing the legitimacy of the police into question. However, agencies that focus on improving relationships with the constituents they serve can help reduce bias, curb resentment, and increase legitimacy. This mutually beneficial partnership can help build trust and respect, which is essential to addressing crime and disorder later.

Based on the literature reviewed above, this research study attempts to accomplish three specific goals. First, the primary goal of the research is to assess the specific contribution of each of the predictor variables (contact with law enforcement, procedural justice, and community context), controlling for gender, age, education and income. The second aim of the research is to assess whether the direction of the relationships using contact with authorities, procedural justice, and community context elements hold up in a more suburban-rural area. Specifically, do the relationships between contact with authorities, procedural justice, community context, and citizen satisfaction found in prior urban-focused literature generalize well to a more suburban-rural setting? Thirdly, given the familiarity between individuals that is often indicative of nonurban areas, another important goal of the study is to determine which specific concept will explain the greatest proportion of variation in citizen satisfaction with police and their services.

Specifically, which concept will explain the greatest proportion of variation in citizen satisfaction within the context of a more suburban-rural setting?

CHAPTER FOUR: METHODOLOGY

Study Site

The data analyzed in this study comes from a community survey conducted by Roanoke County Police Department (RCPD) in collaboration with the Center for Evidence-Based Crime Policy (CEBCP) at George Mason University. Roanoke County is a suburban-rural county located in southwest Virginia, about 250 miles south of the greater Washington, D.C. metropolitan area and encompasses five magisterial districts: Catawba, Cave Spring, Hollins, Windsor Hills, and Vinton. The Roanoke County area is surrounded by mountain ranges, parks, and trails. According to the American Community Survey (2018), Roanoke County is currently home to about 93,583 people. The area is ethnically and racially homogeneous with whites making up the majority (about 88.2%), followed by Black or African Americans (5.7%), then Hispanic or Latinos (2.9%), Asians (2.9%), and two or more races (2.5%). However, the gender breakdown is much more evenly distributed with females making up about 51% (United States Census, 2010).

Additionally, about 21% of the population is 65 or older. According to the United States Census (2010), as far as educational attainment is concerned, a majority of the population that is 25 and older has a high school or equivalent degree (26%), followed by some college but no degree completion (22%), or bachelor's degree (21%). About 61% of the population aged 16 and older is currently employed and the area boasts an

unemployment rate of 2.3%, which is lower than the current 3.7% national average. Also, the population is relatively stable, with about 86% of residents remaining at the same address for over a year. The average household income in Roanoke County is about \$65,467, which is slightly higher than the national average of about \$60,293 (American Community Survey, 2018).

The Roanoke County Police Department (RCPD) is made up of about 140 officers and 16 civilian support positions and is often recognized for providing a safe community environment through data-driven and collaborative initiatives (Roanoke County Police Department, 2018). According to the FBI's Uniform Crime Report (UCR) in 2018, for every 100,000 residents, the Roanoke Valley (which includes Roanoke County and the surrounding areas) has a violent crime rate of 235.4 (lower than the national average of 368) and a property crime rate of 2,378.4 (higher than the national average of 2,199.5). Evidently, Roanoke County has a relatively low crime rate. However, in the last few years, RCPD has seen a spike in mental health and mental health-related calls for service (Yang, Gill, Kanewske, & Thompson, 2018). Despite Roanoke County's low crime rate, the prevalence of mental health issues along with traditional community problems such as disorder and incivilities have become a major cause of concern for citizens (Yang et al., 2018), forcing RCPD to make efficient use of limited resources to tackle community unease.

Data and Sampling

This survey comes from a partnership between Roanoke County Police

Department and Center for Evidence-Based Crime Policy at George Mason University.

The purpose of the survey is to not only understand police-community relations in Roanoke County, but also assess the department's current performance and scope out what improvements' residents would like to see. The questions from this survey are developed using prior survey instruments from other study sites (Weisburd et al., 2020). However, given the contextual differences, there are significant modifications that were made to the questions to reflect norms, values, and issues most relevant to Roanoke County.

This survey addressed various factors that may influence citizen satisfaction with police in a suburban-rural setting. Specifically, it inquired about how safe residents feel in and around Roanoke County, with special attention paid to the type of problems that are most relevant for them. The survey touched on how involved residents in Roanoke County are with their community. It also asked respondents to rate the performance of RCPD officers and whether they feel the department has done enough to adequately address the growing mental health problem in the county. Lastly, the survey inquired about future improvements the local police department can make.

To begin drawing the sample, RCPD's GIS department built a list of all residential addresses in Roanoke County. After data clean, I added the given data with 50,035 points (using X-Y coordinates) to a base map with street and segment buffer created earlier in the year. Next, I joined the points to the closest street segment buffer. Each point was assigned a street segment buffer ID (variable name: NEAR_FID). The mental health (MH) hotspots are the street segments that were classified in chronic

mental health and moderate mental health trajectories, according to the results from a paper being authored by Yang, Gill, Lu, and Park (In Progress).

Finally, I recoded the variable "NEAR_FID" to a new variable "MHhotspot"= 1 if NEAR_FID = the ID of these 63 MH hotspot street segments. A total of 1,426 (2.9%) address points are in mental health hotspots out of 50,035 address points. The reason for separating these mental health hotspots was to eventually oversample from them. It became increasingly important for RCPD to not only understand the perceptions from the general community but also one where they spent a significant proportion of time. As mentioned previously, although Roanoke County boasts a low crime rate, mental health and mental health related calls for service took up a disproportionate amount of time and resources by RCPD (Yang et al., 2018).

Next, I went through the data file containing the complete list of addresses (50,035) to eliminate any business and non-residential locations. I made sure to eliminate all businesses, churches, nursing homes, and other non-residential facilities, leaving me with about 38,285 addresses. Then, I created a PivotTable that showed the total number of addresses in each magisterial district in Roanoke County and the total number of mental health addresses in each district. I calculated the percentage of addresses in each district that are in mental health hot spots and then tripled it to decide how many mental health addresses should be in each sample of 500. For example, Catawba was calculated to have 495 non-MH addresses and 5 MH addresses in the sample. However, because I wanted to oversample from the mental health hot spots, I tripled the number of mental health addresses, leaving me with 485 non-MH address and 15 MH addresses. I repeated

this step for the remaining districts. To draw the sample in Excel, a new tab was created for each magisterial district to generate a random sample. After using a random number in each of the 5 districts, this produced 500 addresses per district – totaling 2,500 addresses.

The survey was mailed via paper copy (with an option to complete online as well) to selected participants drawn from the randomization on January 15th, 2020 and remained open for three months. At the end of the three months, the data was downloaded from Qualtrics into SPSS and originally showed about 308 responses. After data clean up and removal of missing and incomplete information, the final analysis includes 304 complete responses. This resulted in a response rate of 12.16%. I, along with RCPD, intended to mail out a survey reminder. However, due to cost and an unprecedented health crisis, we were unable to, rendering a low response rate, usually indicative of survey studies (Pickett et al., 2018).

Description of Respondents

The sample predominantly identifies as white (90.5%, N = 304), with each other racial category making up less than 2% of the sample. Due to the lack of variability, race is omitted as a control variable. The sample is 58.7% female and 41.3% male (N = 303). Females are slightly overrepresented in this sample, as they only account for about half of the population in Roanoke County. A majority of the participants are between the ages of 56-65 (25.8%) or 75 years and older (23.7%). Since about 20% of the population in Roanoke County is over the age of 65, the sample showcases an older population.

About 25.1% of the sample has at least a bachelor's degree followed by 24.4% that have some college but no degree completion. This sample is highly representative of Roanoke County, as 21% of the population has a bachelor's degree and 22% have some college education without degree completion. Lastly, about 28.2% of the sample makes over \$100k followed by 23.7% making between \$75-99,999k. The median household income in Roanoke County is about \$65,467 so a majority of the sample is bringing in income slightly higher than the average.

Table 1: Descriptive Statistics of Demographic Variables

Measures	N	%
Race		
White	275	90.5
Black or African	3	1
American		
Hispanic or Latino	2	.7
Asian	3	1
American Indian or	1	.3
Alaska Native		
Other	5	1.6
Total	289	95.1
Gender		
Male	125	41.3
Female	178	58.7
Total	303	100
Age		
18-25	1	.4

	26-35	13	4.6
	36-45	24	8.5
	46-55	41	14.5
	56-65	73	25.8
	66-75	64	22.6
	Over 75	67	23.7
	Total	283	100
Educati	ion		
	Some middle school	6	2.1
	or high school		
	High school diploma	44	15.5
	or GED		
	Some college	69	24.4
	Associate's degree	40	14.1
	Bachelor's degree	71	25.1
	Masters, graduate,	53	18.7
	or professional		
	degree		
	Total	283	100
Income	e (\$)		
	<20,000k	6	2.5
	2-34,999k	24	10
	35-49,999k	37	15.4
	50-74,999k	49	20.3
	75-99,999k	57	23.7
	100k+	68	28.2
	Total	241	100
*C		A = = =====16 :	41 4 4 1 1 1 4 1

^{*}Some participants did not answer all questions. As a result, the total number is not equal to 304.

Measures

Outcome Variable

Citizen satisfaction with police and police services is operationalized using a composite measure consisting of 10 items that were averaged. The first set of questions asks respondents how effective or ineffective they think Roanoke County Police Department is at "preventing property crime," "preventing violent crime," "responding quickly to calls for service," and "assisting victims of crime" (4 = very effective to 1 =very ineffective). Another set of questions asks respondents about the following statements: "I have confidence in Roanoke County police officer," "The police department does a good job of working with community members (such as residents, organizations, groups), "The police department has an adequate process for addressing concerns and complaints about the police," "The police department does a good job of communicating with citizens (such as websites, public meetings, newsletters)," "Roanoke County Police Department is willing to listen and take action when residents raise concerns" (4 = strongly agree to 1 = strongly disagree). The final item asks respondents "how satisfied are you with the quality of police services in your neighborhood" (4 = very satisfied to 1 = very unsatisfied). Cronbach's alpha for the citizen satisfaction with police and police services scale indicates high internal consistency in relation to these items ($\alpha = .892$).

Independent Variables

The three primary predictor variables are contact with the police, procedural justice, and a composite measure of community context (specifically, collective efficacy, perception neighborhood conditions, and residential stability). The first independent variable – contact with law enforcement – is measured using two dichotomous variables. To assess contact, the first item simply asks respondents, "have you had any direct contact with Roanoke County Police Department in the past 12 months" (1 = yes, 0 = no). The survey only inquires about contact within the last 12 months because I wanted participants to be able to accurately reflect on their experiences with RCPD. Additionally, to measure victimization, another item asks respondents, "have you ever been a victim of a crime in Roanoke County" (1 = yes, 0 = no).

The second independent variable – procedural justice – is measured using the average of 5 items from the community survey. Respondents are asked to rate the following statements: "Roanoke County police officer(s) treat people in a respectful manner," "Roanoke County police officer(s) are fair and neutral," "Roanoke County police officer(s) clearly explain the reasons for their actions," "Roanoke County police officer(s) consider the views of everyone involved before making decisions," "Roanoke County police officer(s) can be trusted" (4 = strongly agree to 1 = strongly disagree). Cronbach's alpha for the procedural justice scale indicates high internal consistency in relation to these items (α = .946).

The third independent variable – community context – includes collective efficacy, perception of neighborhood conditions, and residential stability, totaling 36

items. To measure collective efficacy, respondents are asked about their experiences in their neighborhood using the following statements: "I live in a close-knit neighborhood," "People in my neighborhood are trustworthy," "People in my neighborhood are helpful to one another," "People in my neighborhood would intervene if someone was vandalizing property," "People in my neighborhood would intervene if a fight broke out in front of their home," "People in my neighborhood would intervene if they saw someone in crisis," "A person like me can have a big impact on making my community a better place," "My local community offers opportunities for me to make a positive impact" (4 = strongly agree to 1 = strongly disagree). The average of these 8 items was created for the collective efficacy scale and Cronbach's alpha for the scale indicates high internal consistency in relation to these items ($\alpha = .887$).

Perception of neighborhood conditions is a composite measure of 26 items that were converted into an average score. The first set of questions asks respondents about the following statements: "I feel safe driving in my neighborhood," "I feel safe driving to work," "I feel safe driving around retail and business areas," "I feel safe riding a bicycle in my neighborhood," "I feel safe riding a bicycle on trails and in parks," "I feel safe riding a bicycle on the street, sharing a road," "I feel safe in my neighborhood during the day," "I feel safe in my neighborhood after dark," "Roanoke County Public Schools are a safe place for children," "It is safe for children to play outside," "I feel safe in my home," "I feel safe at my job or business," "Most people think my neighborhood is becoming more dangerous" (4 = strongly agree to 1 = strongly disagree). The next set of questions asks respondents to rate the following: "Burglaries," "Robberies," "People loitering in

public," "Fights or assaults," "Automobile thefts," "Automobile break-ins," "Teenagers hanging out and being disruptive," "Drug dealing," "Drug use," "People drinking in public," "Online or phone scams targeting the area," "Solicitors/soliciting," and "Drivers speeding in the neighborhood" (1 = big problem, 2 = medium problem, 3 = small problem, 4 = not a problem). Cronbach's alpha for the perception of neighborhood conditions scale indicates high internal consistency in relation to these items ($\alpha = .901$).

Residential stability is measured using two items; homeownership and residential longevity. The first item inquires whether respondents own or rent their homes (1 = 10 homeowner, 0 = 10 renter). The second item asks respondents, "how long have you lived in Roanoke County" (1 = 10 or more years, 1 = 10 years or more, but less than 10 years, 1 = 10 year

Control Variables

The four control variables I utilize include gender, age, education and income. Gender is a dichotomous variable (1 = male, 0 = female). Age is broken down into various categories that participants are asked to select from (7 = over 75, 6 = 66-75, 5 = 56-65, 4 = 46-55, 3 = 35-45, 2 = 26-35, 1 = 18-25). However, due to the small number of participants in the younger age group, I collapsed all respondents age 45 or younger into a single category to be used as a reference in the following regression models. Education is another category that is broken down into a categories (7 = masters, graduate, or professional degree, 6 = bachelor's degree, 5 = associate's degree, 4 = some college, 3 = high school diploma or GED, 2 = some middle school or high school, 1 = primary or elementary school).

Once again, due to the small number of participants in the "some middle school or high school" and "primary or elementary school" categories, I collapsed all respondents with a high school degree or less into a single category to be used in the regression models. The final control variable is income and the categories are as follows (6 = \$100k or more, 5 = \$75-99,999k, 4 = \$50-74,999k, 3 = \$35-49,999k, 2 = \$20-34,999k, 1 = less than \$20k). The small number of respondents in the "less than \$20k" category are collapsed into a single category called "\$34,999k or less" used as a reference group in the regression models for the income variable.

Analytic Strategy

A series of ordinary least squares regression models are used to predict the impact of contact with authorities, procedural justice, and community context on citizen satisfaction with police and their services. Four different models are estimated for the outcome variable to assess the unique contribution of each of the independent variables. Table 6 shows the control only variables and is included as a baseline model. Each additional model builds on the one prior. The second model is displayed in Table 7 and includes controls and contact variables. The third model incorporates controls, contact with law enforcement, and procedural justice. The final model adds the community context variables. It assesses the impact of contact with law enforcement, procedural justice, and community context, controlling for gender, age, education and income.

Table 2: Items included in each respective model

	Model	Variables Included
Model 1 (Table 6)		Control variables only (gender, age,
		education, and income)
Model 2 (Contact)		Controls, direct contact with authorities in
		the last 12, crime victimization
Model 3 (Procedural Justice)		Controls, direct contact with authorities in
		the last 12 months, crime victimization,
		procedural justice
Model 4 (Community Context)		Controls, direct contact with authorities in
		the last 12 months, crime victimization,
		procedural justice, collective efficacy,
		perception of neighborhood conditions,
		homeownership, residential longevity

Correlation Matrix

Table 3 displays a correlation matrix including the dependent variable (citizen satisfaction) and the predictors (contact, procedural justice, and community context).

Table 3: Correlation Matrix

	Citizen	Direct	Crime	Procedural	Collective	Perception of	Homeownership	Residential
	Satisfaction	Contact	Victimization	Justice	Efficacy	Neighborhood		Longevity
						Conditions		
Citizen	1.000	066	074	.561	.340	.308	022	.025
Satisfaction								
Direct Contact	066	1.000	.121	105	054	089	.072	.007
Crime	074	.121	1.000	175	146	195	.047	.170
Victimization								
Procedural	.561	105	175	1.000	.352	.332	.093	091
Justice								
Collective	.340	054	146	.352	1.000	.322	.130	.029
Efficacy								
Perception of	.308	089	195	.332	.322	1.000	.113	094
Neighborhood								
Conditions								
Homeownership	022	.072	.047	.093	.130	.113	1.000	069
Residential	.025	.007	.170	091	.029	094	069	1.000
Longevity								

Multicollinearity

In addition, I conducted tests of multicollinearity for all of the independent variables and detected no serious multicollinearity issues using tolerance and variance inflation factor (VIF) scores. This study is less prone to high levels of multicollinearity as the tolerance scores are well above the threshold of .2 and VIF scores are below the threshold of 10.

Table 4: Collinearity Statistics

Variable	Tolerance	VIF
Direct Contact	.970	1.031
Crime Victimization	.906	1.104
Procedural Justice	.806	1.241
Collective Efficacy	.811	1.233
Perception of Neighborhood	.818	1.223
Conditions		
Homeownership	.957	1.044
Residential Longevity	.951	1.052

CHAPTER FIVE: RESULTS

This study examines how contact with law enforcement, procedural justice, and community context are associated with citizen satisfaction with police and their services.

Table 5 shows the descriptive results for each of the variable under analysis.

Table 5: Descriptive Statistics for Each Variable Under Analysis

Variable	N	Mean	SD	Minimum	Maximum
Citizen	290	3.2498	.58775	1.20	4.00
Satisfaction					
Direct Contact	92	.3026	.46015	.00	1.00
Crime	76	.2500	.43373	.00	1.00
Victimization					
Procedural	265	3.2989	.58972	1.20	4.00
Justice					
Collective	289	3.1109	.47954	1.00	4.00
Efficacy					
Perception of	301	3.2619	.44117	1.69	4.00
Neighborhood					
Conditions					
Homeownership	304	.9211	.27010	.00	1.00
Residential	287	3.7003	.72476	1.00	4.00
Longevity					

Table 6 (Model 1) shows the demographic only model, which has an R^2 of .069 (6.9%). While these demographic variables do little to add to the explanatory power of the model, they still serve as important controls.

Table 6: Baseline Control-Only Model

Gender (re	f:			β	t
Gender (10					
female)					
Male	-	156	.070	132	-2.226*
Age (ref: 4	-5				
and under					
46-55		.102	.127	.060	.805
56-65	-	.054	.109	039	494
66-75		.171	.112	.121	1.526
75 and	up	.171	.114	.123	1.500
Education	(ref:				
high school	ol or				
less)					
Some		.077	.104	.055	.739
college	;				
Associ	ates	.165	.122	.096	1.348
degree					
Bache	or's	.209	.110	.152	1.910
degree					
Master	s, -	.042	.116	028	361

053	.119	029	445
.022	.107	.014	.205
.135	.106	.091	1.273
.062	.109	.044	.569
	3.122		
	1.565		
	.069		
	.022 .135	.022 .107 .135 .106 .062 .109 3.122 1.565	.022 .107 .014 .135 .106 .091 .062 .109 .044 3.122 1.565

The Impact of Contact, Procedural Justice, and Community on Citizen Satisfaction

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

Table 7 presents various OLS regression models of relationships with satisfaction with police, with each one building on the prior model. The contact model in Table 7 adds measures of direct contact with law enforcement within the last 12 months and crime victimization to the list of control variables. Although this model is statistically nonsignificant, it slightly increases the R^2 from .069 to .075. This is an improvement of about .6%. It is important to note that with the addition of the contact variables, the coefficient for gender remains significant (b = -.150, p = .034), implying a negative relationship between gender and citizen satisfaction with police and police services.

The second model in Table 7 then adds a measure of procedural justice, along with the contact and control variables to assess citizen satisfaction with police and their

services, raising the R^2 to .375. The addition of the procedural justice measure improved the explanatory power of the model by 30%. Interestingly, the inclusion of procedural justice changes the direction of the relationship from negative to positive for the two contact variables (direct contact and crime victimization). In this model, gender (b = -.142, p = .023) maintains a negative relationship with citizen satisfaction with police and their services. The procedural justice model is statistically significant, F(16, 245) = 9.199 and coefficient for procedural justice (b = .581, p < .001) is positively related to citizen satisfaction with police and police services.

The last model in Table 7 incorporates measures relating to community context. The final model includes controls, variables relating to contact with authorities, procedural justice, collective efficacy, perception of neighborhood conditions, and residential stability (homeownership and residential longevity). This model indicates a statistically significant relationship, with an increase of 2% of variability explained, changing the R^2 from .375 to .395. In this model, procedural justice (b = .505, p < .001), collective efficacy (b = .161, p = .041), and perception of neighborhood conditions (b = .184, p = .024) are all significantly and positively associated with citizen satisfaction with police and police services. In this model, the coefficient for gender (b = -.136, p = .037) continues to uphold a negative relationship with citizen satisfaction. Of the three significant predictor variables, procedural justice has the largest coefficient (β = .492), followed by perception of neighborhood conditions (β = .133), and then collective efficacy (β = .124).

Table 7: Impact of Contact, PJ, and Community on Citizen Satisfaction with Police and Police Services

Variable	Contact	Procedural Justice	Community
	b (SE)	b (SE)	Context
			b (SE)
Direct Contact	010 (.076)	.012 (.066)	.015 (.068)
Crime Victimization	105 (.081)	.045 (.070)	.074 (.076)
Procedural Justice		.581 (.054)***	.505 (.061)***
Collective Efficacy			.161 (.078)*
Perception of			.184 (.081)*
Neighborhood			
Conditions			
Homeownership			333 (.196)
Residential Longevity			.034 (.049)
Gender (ref: female)			
Male	150 (.071)*	142 (.062)*	136 (.065)*
Age (ref: 45 and under)			
46-55	.109 (.128)	.099 (.112)	.069 (.119)
56-65	047 (.110)	.031 (.097)	.001 (.108)
66-76	.177 (.113)	.193 (.101)	.152 (.112)
75 and up	.165 (.115)	.167 (.103)	.145 (.117)
Education (ref: high			
school or less)			
Some college	.060 (.106)	.030 (.093)	018 (.099)
Associates	.159 (.123)	.149 (.106)	.080 (.111)
degree			
Bachelor's	.194 (.110)	.089 (.097)	013 (.105)
degree			

Masters,	036 (.117)	.017 (.101)	052 (.109)
graduate or			
professional			
degree			
Income (\$) (ref:			
34,999k or less)			
35-49,999k	048 (.120)	051 (.104)	051 (.108)
50-74,999k	.005 (.108)	058 (.096)	090 (.101)
75-99,999k	.131 (.106)	.109 (.094)	.101 (.099)
100k+	.051 (.109)	.061 (.097)	.063 (.102)
Intercept	3.161	1.207	.636
F test	1.472	9.199***	7.257***
\mathbb{R}^2	.075	.375	.395

^{*}p < .05; **p < .01; ***p < .001

CHAPTER SIX: DISCUSSION

The primary objective of the current study is to examine how contact with authorities, procedural justice, and community context are associated with citizen satisfaction with police and their services. A quick look at the descriptive breakdown indicates that residents of Roanoke County are primarily satisfied with police and police services, with a mean of 3.2 out of 4. More so, the current analyses are largely supportive of the relationships, with a few exceptions. The two variables relating to contact with authorities include direct contact with law enforcement in the last 12 months and crime victimization. The contact model in Table 7 is only able to account for 7.5% of the variability. In the past, Schafer et al. (2003) was able to establish that any type of contact led to reduced satisfaction in a Midwestern setting. Similarly, the coefficients for both direct contact and crime victimization are negative, implying a negative relationship between contact and citizen satisfaction with police and police services. In other words, as the amount of contact between police and residents increases, the level of citizen satisfaction with police and their services decreases.

However, because the overall direct contact and crime victimization variables are nonsignificant, these results should be interpreted with caution. The coefficients for direct contact and crime victimization may have been nonsignificant due to confounding variables. Prior studies have shown that the relationship between contact with and

perceptions of the police are influenced by a number of factors including type, quality and frequency (Alberton & Gorey, 2018; Lee et al., 2019; Nofziger & Williams, 2005; Schafer et al., 2003). In fact, Nofziger and Williams (2005) argue that particularly in smaller communities, it appears that the quality of the interaction between police and citizens, not simply contact, has a significant impact on confidence in the police. In line with that logic, it is plausible that to accurately gauge how direct contact is associated with perceptions of the police, it is necessary to go beyond whether an individual has had contact or not. Rather, assessing the frequency and the quality of that contact may be more important.

Further, although past research has shown that crime victims tend to be less satisfied with police and their services (Cao et al., 1996; Sargeant, 2017; Wells, 2007), the results in this study for victimization are nonsignificant. In addition, crime victimization has a mean of .2 (N = 76), on a dichotomous scale, implying that a large proportion of residents of Roanoke County are less likely to be victims of crime. This could simply be a result of a close-knit community, a mark of more rural areas. According to Weisheit et al. (2006), residents of rural areas often abide by norms which stress independence and handling problems internally. It is plausible that given the familiarity with one another, residents in suburban-rural areas maintain order through informal mechanisms.

Additionally, the small sample size in the contact variables could be one of the reasons why the relationship between contact and satisfaction is not as overt as it could be. According to Shapiro (2011), sample sizes should be representative of the population

and a larger sample size allows researchers more statistical power to be able to accurately detect any relationships. As mentioned previously, of the 304 people that answered, only about 92 individuals had direct contact in the last twelve months and only about 76 people had ever been a victim of crime in Roanoke County. The small sample sizes in each of the respective variables could be masking some relationships that may have been at play. Interestingly, the direction of the relationship for both direct contact and crime victimization changes from negative to positive in the procedural justice model and in each model following, in Table 7. The implication of this could be that the association between contact and citizen satisfaction may be mediated by other factors such as procedural justice. In fact, given the norms and values indicative of nonurban areas, contact may be further influenced by other external factors.

On the other hand, despite little contact with their local police department, residents of Roanoke County regard their law enforcement as procedurally just (M = 3.3/4, N = 258). Procedural justice is not only statistically significant but is able to account for 37.5% of the variability, making it one of the best performing models. In fact, the addition of the procedural justice variables increased the amount of variability explained by 30%. Studies in the past have found similar results regarding the process-based model (Antrobus et al., 2015; Hinds, 2009; Nix et al., 2015; Reisig, Mays, and Telep, 2018; Tyler & Huo, 2002; Tyler, 2003; Tyler, 2005; Wells, 2007). According to Antrobus et al. (2015), residents place much more emphasis on the way they are treated by police when they feel others in their community view the police as less legitimate.

This implication may be at play but in the opposite direction: Roanoke County residents place less emphasis on the way they are treated by police because they know others in their community view the police as very legitimate. It appears that even though the sample did not have overwhelming contact with the police, they still regard the department as being procedurally just. In fact, those that did have contact rated that contact in a positive manner. The reason for this could be because the community norms in Roanoke County accentuate the value of law enforcement.

Weisheit et al. (2006) stress that policing in rural areas is vastly different than their urban or suburban counterparts. The authors maintain that rural communities stress more public support for being tough on crime and in such areas, officers are likely to know specific individuals that may partake in crime (Weisheit et al., 2006). Given the close social ties between a police department and the community, it is possible that officers use a tailored approach to policing and in turn, local residents are more supportive of the police and their activities (Weisheit et al., 2006). The generally low levels of crime in Roanoke County may indicate to residents that the RCPD is competent and truly there to serve and protect (Roanoke County Police Department, 2018). As a result, citizens view the police as being procedurally just, despite having minimal direct contact. In fact, the effect of procedural justice may be accentuated by the norms and values of a more suburban-rural community. Residents may afford local law enforcement more legitimacy, especially if they are aware of others in their community that hold similar views (Cialdini, 2001).

Further, the relationship between procedural justice and citizen satisfaction with police and police services continues to hold up in each of the following models in Table 7, holding all other variables constant. In each respective model, the standardized regression coefficient for procedural justice is the largest, making this variable the most impactful. Much like urban-focused studies (Antrobus et al., 2015; Hinds, 2009; Nix et al., 2015; Resig et al., 2018; Tyler, 2005), elements of procedural justice adapt well in a more suburban-rural setting and the relationship between procedural justice and citizen satisfaction is in the expected direction.

Moreover, of the community context variables, I found the most support for perception of neighborhood conditions and collective efficacy. Interestingly, the standardized coefficient for the variable perception of neighborhood conditions (β = .133) is more impactful than the concept of collective efficacy (β = .124). Prior studies have found a link between disorder and incivilities and satisfaction with the police (Cao et al., 1996; Circo et al., 2019; Nofziger and Williams, 2005; Reisig and Parks, 2000; Reisig and Parks, 2003; Schafer et al., 2015), with the general consensus being that neighborhoods marked by high levels of disorder tend to produce residents that are less satisfied with police and their services.

The mean level of perception of neighborhood conditions variable, which inquires about how safe residents feel in and around Roanoke County and what they deem to be major problems, stands at roughly 3.3 out of 4, implying that residents of Roanoke County do not believe that their neighborhoods are particularly marked by high levels of disorder or incivilities. It appears that Roanoke County residents do not note major crime

problems in their neighborhoods, which in turn, impacts how positively they view their local police. As a result, the concept of perception of neighborhood conditions acclimates well within a suburban-rural context and enjoyed the most support amongst the community context variables.

In addition, Reisig and Cancinco (2004) argue that neighborhoods marked by trust and solidarity have the potential to reduce such incivilities, confirming the relevance of collective efficacy. In fact, collective efficacy enjoys the most support amongst the community context variables, following the perception of neighborhood conditions predictor. Much like prior studies (Circo et al. 2019; Holmes et al., 2017; Jackson and Sunshine, 2007; Li et al. 2016; Nix et al., 2015; Ren et al. 2015; Sargeant, 2017; Schafer et al., 2003; Zhao and Ren, 2015), I also find that collective efficacy is fundamentally connected to citizen satisfaction with police and police services. The mean level of collective efficacy for the sample is 3.1 (out of 4), implying that residents of Roanoke County view their neighborhoods high in both social cohesion and informal social control. Much like Osgood and Chambers (2000) who found that features of social disorganization theory "generalize well to rural communities" (pp. 100), I find plethora of support for the concept of collective efficacy. In fact, elements of collective efficacy contextualize well within uniquely suburban-rural settings and the association between collective efficacy and citizen satisfaction is in the expected direction.

Lastly, although past research has found that homeowners are usually more satisfied with police as opposed to renters (Nofziger and Williams, 2005; Reisig and Parks, 2000; Rhineberger-Dunn and Carlson, 2009), both measures of residential stability

(homeownership and residential longevity) are nonsignificant in the last model in Table 7. A breakdown of the variables indicates a lack of variability in each of them, which could be masking any potential relationships that exist. For instance, homeownership has a mean of .92, on a dichotomous scale, indicating that most residents of Roanoke County reside in homes that they own. Also, residential longevity has a mean of 3.7 out of 4, implying that residents of Roanoke County have largely remained in their homes for a number of years (between 5-10 years at least). The lack of variability in each predictor is attributed to the lack of support for how well residential stability contextualizes in a nonmetropolitan area.

Because Roanoke County residents may already reside in an area high marked by residential stability, they may be more satisfied with police and police services, although the relationship may not have been detected due to the lack of variability in the predictors. According to Rhineberger-Dunn and Carlson (2009), residential stability is positively associated with collective efficacy, meaning that more stable neighborhoods lead to higher levels of collective efficacy. In this particular study, collective efficacy has a weak but positive relationship with residential stability. Despite the residential stability variables being nonsignificant in the study, the lack of variability within the predictors and the high levels of collective efficacy indicate cohesion amongst the community, which in turn, is associated with more satisfaction with police and police services.

Limitations

While this study is able to find support for various predictors, namely procedural justice and collective efficacy, as being associated with citizen satisfaction with police

and police services, there are several limitations that require consideration and should aim to guide directions for future research. First, the biggest limitation to this study is its nonresponse bias which can occur when participants in a given sample do not respond. It is important to note that responses have declined for all survey mediums, including major ones such as the National Crime Victimization Survey (Pickett et al., 2018). The low response rates may be attributed to the fact that the survey was addressed from the police department. Some individuals may have chosen not to complete the survey because they fear what the police department may do with the information, although complete anonymity is promised to them through IRB guidelines. Another reason that respondents may have chosen to disregard the survey is because there were no subsequent reminders that were mailed to individuals, after the original survey instrument was delivered. The response rate could have increased, had the research team had an opportunity to mail out a quick reminder midway through the data collection period.

Secondly, it is possible that the limited sample size may be masking some of the relationships between the predictors and satisfaction with the police. Some of the regression coefficients in the models do not reach significance. Increasing the sample size for future studies may produce results that align more closely to the actual population. Since the goal of the study is to infer important implications, having a larger sample size would be more representative of the population under study.

Additionally, it is important to consider the generalizability of the current sample. In terms of demographics, females are slightly overrepresented in the sample than they are within Roanoke County (58.7% v. 51.8%, respectively). Generally, prior studies have

found that being female is positively associated with satisfaction with the police (Cao et al., 1996; Hinds, 2009). While this study is able to confirm that males tend to be less satisfied than their counterparts, it is important to be mindful of the slight elevation in the number of female respondents, as they tend to rate law enforcement much more favorably than their male counterparts.

Roanoke County is also characterized by a larger older population, compared to the rest of the nation. Prior research has found that individuals who are older tend to be more satisfied with police and traditional police services (Cao et al., 1996; Circo et al., 2019; Hinds, 2009; Reisig and Parks, 2000; Ren et al., 2015; Rhineberger-Dunn and Carlson, 2009; Sargeant, 2017). Favorable ratings about officer performance may be related to the age of the participants, which may not always hold up in other areas of the nation.

In addition, Roanoke County is predominantly white, which in turn, yielded an overwhelmingly white sample. There is a large body of literature that maintains that Black people and other minorities are usually less satisfied with police and their services (Bradford et al., 2009; Cao et al., 1996; Circo et al., 2019; Li et al., 2016; Reisig & Parks, 2000; Skogan, 2006; Wells, 2007). In fact, even within the context of this study, a descriptive breakdown of satisfaction by race indicates that the relationship may be even more unclear. Of the 304 participants that took the survey, only 13 of them indicated that they identified with a racial category other than white. Amongst that pool of 13, about 31% disagreed that they were satisfied with police and their services compared to only about 21% white respondents who said the same thing. It is particularly important to

understand and center the experiences and perceptions of people of color in predominantly white communities. Future studies should do their due diligence and aim to uncover how people of color perceive their local law enforcement in a more suburbantural setting. Evidently, assessing the relationship between race and satisfaction with police is extremely pertinent but was not possible in this study due to the lack of variability in both the population and sample.

Furthermore, Roanoke County ranks higher than the national average in both education and income, two socioeconomic factors that could limit the type of socialization and contact individuals have with their police department (Antrobus et al., 2015; Lee et al., 2019; Cao et al., 1996; Rhineberger-Dunn and Carlson, 2009; Hinds, 2009). In fact, Roanoke County is particularly unique due to its suburban-rural designation, in so much that it may not even be as readily representative of other rural communities in terms of both education and income. Nonmetropolitan areas tend to rank lower in socioeconomic status (Donnermeyer & DeKeseredy, 2014) as opposed to more urban or suburban areas. Although the sample population is less representative of other parts of the nation, it still reflects the overall Roanoke population under study.

Lastly, another issue that comes up within the scope of this study is the level of variance explained (R^2). Although I find plethora of support for some models, there are significant models that explain very little variability. Specifically, the contact model had an extremely low R^2 (about 7.5%). However, Weisburd and Piquero (2008) maintain that studies with a low R^2 can still, "have important implications for theory and policy, the troubling problem remains of omitted variable bias and its impact on predictions of

outcomes and the validity of specific effects of variables included in a regression model" (pp. 484). As such, it is likely that some of the models in this study yield a low R^2 due to the other variables that are omitted. For instance, future studies looking at contact with law enforcement should aim to uncover the nature, frequency, and quality of the contact, rather than just contact itself.

Practical Implications

The findings reported in this study have some important practical implications for the Roanoke County Police Department. There is a growing body of literature that suggests that brief but positive encounters with the police can play an important role in altering attitudinal perceptions over time (Bradford et al., 2009; Hinds, 2009; Reisig & Parks, 2000; Skogan, 2006). Because negative encounters may be more salient (Rozin & Royzman, 2001), it is important for police to incorporate various communication methods to mitigate altercations between the public and law enforcement and ensure compliance. Currently, one of the ways that the police engages with the public is through implementation of Tyler's process-based model, or procedural justice (Tyler and Huo, 2002; Sunshine and Tyler, 2003; Tyler, 2004). The results from this study indicate that residents of Roanoke County overwhelmingly believe that RCPD officers act in a procedurally just manner and in turn, are satisfied with their local police department and their services. The principles of procedural justice include fairness, transparency, voice, and impartiality (Tyler & Huo, 2002).

However, toward the end of the survey, participants were asked about how they would like Roanoke County Police Department to prioritize resources and make future

improvements. Amongst the items that were listed, focusing on recruiting and retaining qualified personnel (N = 260, M = 3.5/4) and improving police-community relations (N = 248, M = 3.3/4) topped the list (Thompson, 2018). Of the participants that answered these questions, an overwhelming majority either strongly agreed or agreed with RCPD prioritizing recruiting and retaining qualified personnel and improving police-community relations. These responses and the portrayal of a negative relationship in the contact model in Table 7 allude to some potential disconnect in communication between the police and Roanoke County residents. Although RCPD may be rated high in procedural justice, it is possible that residents may be looking for a different kind of communication style. For instance, the disconnect between the police and their constituents may be attributed to a lack of understanding about community values. Evidently, the community believes that officers act in a procedurally just manner but could benefit from the addition of more approachability in interactions with the police.

As a result, the first recommendation to Roanoke County PD would be to couple procedural justice principles with effective interpersonal and communication skills. Although some police academies already provide their officers with communication-based programs (McDermott & Hulse, 2012), there is a clear disconnect between what officers learn and what they choose to implement or what the community expects. I recommend that RCPD tailor their interpersonal and communication skills to align with the values of the overall Roanoke community. Since it appears that residents of Roanoke County have minimal encounters with the police, the salience of these interactions may be exacerbated. "If officers cannot communicate with the public, poor community

relations will hinder even the most technically proficient departments," (McDermott & Hulse, 2012, pp. 17). Therefore, it is necessary for RCPD to approach people using effective interpersonal and communication skills to avoid negative police-community relations.

Additionally, positive police-community interactions can only occur when the police are out with residents, actively trying to engage the community. One of the biggest findings of this study is that concepts of collective efficacy contextualize well in a uniquely suburban-rural setting. The police department should take advantage of such a finding by organizing the community, encouraging volunteerism (Bureau of Justice Assistance, 2008), and engaging in proactive community policing. In the beginning of the survey, participants were asked to identify which programs they had used from a list of various programs. Of the 248 respondents who noted that RCPD should focus on improving police-community relations, only about 59 had actually volunteered or used a community program in some capacity. RCPD should focus on individuals such as these to help recruit and encourage their activism.

In doing so, the department should make active efforts to partake in local community events and engage with important stakeholders to foster positive police-community relations. Residents of Roanoke County should not be only seeing and interacting with their local police department in an enforcement capacity. Instead, the police should show up to events that the community deems important so citizens can build trust, respect, and ultimately, satisfaction with the police department. According to Reisig and Parks (2003), individuals tend to be more satisfied with police when they

observe them on foot or on a bicycle, as opposed to an automobile. By partaking in active community policing, RCPD will be able to build trust and cooperation with the community, which in turn, will lead to higher satisfaction with the police department (Circo et al., 2019).

Finally, the last recommendation that can be derived from this study is for RCPD is to continue to monitor both citizen and police perspectives. Community surveys are one way for the police department to collect feedback about their overall performance and stress to residents that the police department cares about the quality of service they provide. Agencies can analyze how they provide services to their constituents and assess the best way possible to leverage and allocate resources. Part of effective communication between the police department and their constituents is constant communication.

According to Lum and Nagin (2017), "Police should routinely, systematically, and rigorously survey citizens on their reactions to policing in general and to specific tactics and regularly report results and actions that will be taken to foster favorable citizen responses and remediate negative responses" (pp. 343). The best way for Roanoke County officers to establish and maintain communication with the local community is to continuously receive feedback through mediums such as surveys, tackle destructive issues, and foster a positive relationship.

CHAPTER SEVEN: CONCLUSION

This study aims to understand how contact with authorities, procedural justice, and community context are related to citizen satisfaction with police and their services in a more suburban-rural setting. Overall, the findings continue to lend support to the concepts of procedural justice, perception of neighborhood conditions and collective efficacy, evidently suggesting that officers who act in a more procedurally just manner and orderly neighborhoods high in collective efficacy lead to communities that are more satisfied with police and police services. These findings point to the need for Roanoke County Police Department, as well as other suburban-rural departments, to explore new ways to support procedural justice and community efforts using appropriate norms and values.

Some of the data in the study suggests that although Roanoke County residents are overall satisfied with police, they still believe that the department should prioritize improving police-community relations. The call for police departments to implement communications-based training has been ringing for a number of years (McDermott & Hulse, 2012), particularly due to the salience of negative encounters (Rozin & Royzman, 2001) and asymmetry in the impact of police interactions (Skogan, 2006). In fact, implementing such strategies has never been more imperative, given the strain on police-community relations.

Police are often one of the first to provide emergency assistance, regulate neighborhood activity, and deliver resources, as necessary. Engaging the community can only make the department's job easier, particularly if the community sees that the police are responding to their voiced concerns. As a result, the police will be able to gain the public's confidence, trust, and eventually, compliance. Doing so will lead to active community members that regularly report crimes to the police and engage in neighborhood regulation (Sargeant, 2017). Making fundamental changes to police tactics and behavior, particularly in regard to procedural justice and community regulation can address citizen concerns and allow the agency to better target desirable outcomes while simultaneously improving police-community relations.

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