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Perceptions of Residents in Rural Areas Toward Law Enforcement

Joseph James Wagner
Walden University

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Walden University

College of Social and Behavioral Sciences

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Joseph James Wagner

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the review committee have been made.

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2019

Abstract

Perceptions of Residents in Rural Areas Toward Law Enforcement

by

Joseph James Wagner

MS, Oklahoma State University, 2012

BS, Oklahoma Panhandle State University, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

Walden University

November 2019

Abstract

Negative public perceptions toward law enforcement officers (LEOs) have increased in recent years as the result of police shootings of unarmed men. Researchers have focused on urban residents' perceptions toward LEOs, but have not examined the perceptions of rural residents. The purpose of this quantitative study was to examine the relationship between the dependent variable (DV) of rural citizens' perceptions toward LEOs and the independent variables (IVs) of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status. The social judgment theory and the primary socialization theory were used as the theoretical foundations to determine how the IVs affected the DV. A sample of 282 residents from southeastern Colorado completed the Perceptions of Police Scale and a demographics questionnaire. Multiple linear regressions were conducted to examine the relationship between the DV and the IVs. Results indicated that as educational attainment increased, perceptions toward LEOs increased. Residents had a positive perception toward LEOs on a number of scale items: Residents agreed that the police were helpful, provided safety, and protected them. Findings may be used to develop interventions to improve relationships between LEOs and residents living in rural areas who continue to have negative perceptions of the police.

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Dedication

I dedicate my dissertation to all law enforcement personnel who work hard and sacrifice for all residents, even residents who might not like them. I also would like to dedicate this to everyone who believed in me and supported me.

Acknowledgments

I would like to acknowledge many people who helped me during this journey. I would like to acknowledge my wife for her support, patience, encouragement, and understanding. I could not have done this without her support. To my daughter, whom I want to make proud, it was tough having to be at the computer when I wanted to spend time with you.

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Chapter 1: Introduction to the Study

Public perceptions regarding police in the United States have shifted in the last 4 to 5 years. Riots, protests, and negative perceptions toward law enforcement have increased in the United States, in large part as the result of the increasing number of police shootings of unarmed men (Culhane, Boman, & Schweitzer, 2016; Gerber & Jackson, 2017; Newport, 2016). Incidents in urban areas such as Ferguson, Missouri (Chaney & Davis, 2015); Charlotte, North Carolina (Larimer, 2016); and Baltimore, Maryland (Wen et al., 2015) have sparked riots and protests. The shooting of Michael Brown by Officer Darren Wilson in Ferguson, Missouri, has been viewed as an example of Black males being shot by White police officers (MacDonald, 2016). Protests burgeoned, and suspects increasingly challenged officer authority after Officer Wilson's lack of indictment for Brown's death (MacDonald, 2016).

A significant increase in police ambushes also has been identified (MacDonald, 2016). These incidents have changed the relationship between law enforcement officers (LEOs) and the public. For the purposes of this study, the terms *LEOs*, *police*, and *law enforcement* were used interchangeably. Similar to the participants in MacDonald's (2016) study, the participants in Nix, Wolfe, and Campbell's (2018) study expressed the belief there has been an active "war on cops" (p. 33) in which media scrutiny and assaults against the police have increased because of residents' negative perceptions of and lack of trust toward the police. The results of previous studies have shown that most urban residents' perceptions of law enforcement have been negative (Ho & Cho, 2016; Newport, 2016). Perceptions of residents in rural areas toward law enforcement have remained

relatively unknown because research has focused on residents in urban areas (Benedict, Brown, & Bower, 2000).

The focus of this study was to investigate the perceptions of rural residents toward LEOs, including departments employing 10 or fewer officers, which are the most common type of agency in the United States (Banks, Hendrix, Hickman, & Kyckelhahn, 2016). Nearly 20% of the U.S. population lives in rural areas (U.S. Census Bureau, 2018), making it important to understand their perceptions toward the police. Small towns play an important role in U.S. economic prosperity because of their roles in agriculture, fisheries, and farming (Tacoli & Agergaard, 2017). People in urban areas rely on people living in rural areas to provide them with wind, solar, and geothermal energy and food (Brown & Schafft, 2011). Benedict et al. (2000) suggested that the public perceptions toward law enforcement in rural areas could be relevant to society and valuable to informing rural police administrators on ways to meet the diverse needs of their communities.

Effective policing requires that LEOs convince residents that they are trustworthy and are performing their duties ethically. An increase in perceived lawfulness and fairness increases residents' compliance, promoting greater communication and assistance between residents and officers (Tankebe, Reisig, & Wang, 2016). Residents are more willing to comply with law enforcement when they perceive the police as being lawful and reasonable and having high levels of procedural justice (Leslie et al., 2016; Maguire, Lowrey, & Johnson, 2017; Murphy, Bradford, & Jackson, 2015; Pehrson, Devaney, Bryan, & Blaylock, 2017). Positive interactions with LEOs also can positively

impact public perceptions about the police (Leslie et al., 2016; Maguire et al., 2017; Murphy et al., 2015; Pehrson et al., 2017). Public safety and LEO safety can be compromised when law enforcement agencies lose residents' compliance (Gau & Brunson, 2015; Maguire, Barak, Cross, & Lugo, 2016). The results of this study may help LEOs understand the factors correlated with residents' perceptions toward law enforcement and tailor policies accordingly.

Chapter 1 contains information about the relationships between and among several variables that may impact and be impacted by perceptions about law enforcement. Not understanding how to interact with the diverse residents whom LEOs serve has limited their progress with diverse populations (Becerra, Wagaman, Androff, Messing, & Castillo, 2017; Dixon, Schell, Giles, & Drogos, 2008; Roles, Moak, & ten Bensel, 2016). Officers interact with residents from ethnicities and cultures that they may not understand (Dixon et al., 2008). A lack of communication, language barriers, cultural differences, and stereotypes contribute to misunderstandings between LEOs and residents (Coon, 2016; Dixon et al., 2008; Roles et al., 2016). These issues make it difficult for law enforcement departments to improve relationships with residents without having an adequate understanding of the communities they serve, the problems that the communities face, and the specific needs of these communities (Becerra et al., 2017; Headley, Guerette, & Shariati, 2017; Schafer & Varano, 2017).

The purpose of this quantitative study was to examine the relationship between rural citizens' perceptions toward LEOs (the dependent variable [DV]) and the demographic factors (independent variables [IVs]) of age, gender, ethnicity, religion,

marital status, sexual orientation, income, employment status, educational attainment, and immigration status. Having a better understanding of the perceptions of rural residents toward LEOs has implications for positive social change by helping LEOs to have a better understanding of the residents whom they serve.

The gap in the research literature is at the nexus of rural communities and public perceptions toward the police. The dearth of research on rural communities' perceptions toward the police has resulted in an inadequate understanding of police-community relations. Future researchers could use the results of this study to close the gap in the literature. The theoretical foundation of this study comprised the social judgment theory (Brunswik, 1952; Hammond, 1955; Hammond, Stewart, Brehmer, & Steinmann, 1975; Sherif & Hovland, 1961) and the primary socialization theory (Oetting, Donnermeyer, Trimble, & Beauvais, 1998; Parsons, 1951). The theories and the rationale for their use are outlined in this chapter. I applied a quantitative method to assess the relationship between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs. Definitions of key terms are included in Chapter 1. Assumptions, scope, delimitations, and limitations are addressed to frame the boundaries of the study. The chapter concludes with an explanation of the significance of the study and ways in which perceptions of residents in rural areas toward law enforcement may be beneficial to the development of policies and more positive engagement with community members.

Background

Several factors can affect residents' perceptions toward law enforcement. For example, residents' experiences with the police can be a significant factor in the formation of their perceptions (Antrobus, Bradford, Murphy, & Sargeant, 2015; Dai & Jiang, 2016; Flexon, Greenleaf, Dariano, & Gibson, 2016). Comments from news articles, regardless of their legitimacy, can alter individuals' perceptions (E. J. Lee, Kim, & Cho, 2017). Hostile media perceptions can contribute to activism and affect perceptions, depending upon political ideology (Feldman, Hart, Leiserowitz, Maibach, & Roser-Renouf, 2017).

Police-involved shootings, along with any ensuing riots or protests, can influence the perceptions of adults and youth toward law enforcement. Children are exposed to this violence, whether through firsthand experience or the media. Exposure to police violence can cause children emotional, cognitive, or social trauma, contributing to their distrust as adults of law enforcement (Dennis, 2015). Criminal offenses committed by adolescents tend to peak from the ages of 15 to 19 years and then decline in the early 20s (National Institute of Justice, 2014a). Youth who have traumatizing contact with LEOs often perceive LEOs less favorably than adults do (Van Damme & Pauwels, 2016).

Social factors such as family members, peers, the media, or the adolescents' experiences can influence their perceptions toward law enforcement (Dennis, 2015). For instance, police officers often are the first responders whom children encounter when violence occurs in their homes (Överlien & Aas, 2016). One third of the sexual assault victims encountered by police are adolescents, whose first encounters with the police are

as the victims of crime (Greeson, Campbell, & Fehler-Cabral, 2014). Children as young as 5 years of age have called the police in response to violence in the home (Radford & Hester, 2015). Such violent interactions present an opportunity for officers to leave a positive or negative impression on the children, which may have lasting impacts on how the children view police.

The police have improved their handling of domestic violence issues (Överlien & Aas, 2016), a change that has improved children's views of the police when they are removed from their homes (Radford & Hester, 2015). These experiences affect the ways that the children perceive law enforcement. There is a positive impact on victims' emotional well-being when the police interact with victims in compassionate, caring, and personal ways. Victims' views toward law enforcement improve during these interactions. Compassionate, caring, and personable interactions between victims and the police can promote victims' emotional well-being and improve attitudes toward the police regardless of the ages of the victims (Greeson et al., 2014).

Similar situations can affect adults' perceptions toward law enforcement. Anything that adults see, hear, or experience may affect their perceptions toward law enforcement. The factors include, but are not limited to, peer influence, gang member influence, the news, television shows, and personal experiences. Neighborhood residents with higher education levels, income, and age tend to be more satisfied with law enforcement (Afon & Badiora, 2016; Corsaro, Frank, & Ozer, 2015; McNeeley & Grothoff, 2016). In contrast, neighborhoods with high rates of poverty tend to have higher crime rates; however, stealing often is viewed as a necessary source of income

(Graif, Gladfelter, & Matthews, 2014; Patel, 2014). Negative perceptions toward the police often form when residents believe that they are being mistreated during encounters with LEOs. Encounters in these neighborhoods often are negative, and people feel mistreated (Gau & Brunson, 2015).

Different factors can contribute to the perceptions of arrestees toward the police. In general, women, individuals who are elderly, people who are employed, people with more education, and individuals who are in the country illegally often are more cooperative if they need to be arrested (White, Mulvey, & Dario, 2016). Perceptions of fairness and effectiveness by the police contribute to increased cooperation. Lower levels of cooperation correlate with drug or alcohol use, prior arrests, and the receipt of illegal income (White et al., 2016). Increased delinquency and deviant attitudes can occur when juveniles are arrested (Wiley & Esbensen, 2016). Arrestees' perceptions toward the police can be negative, but they also can change depending on perceived fairness, age, gender, and arrest circumstances (White et al., 2016).

Perceptions toward LEOs tend to be more positive during arrests when procedural justice and legitimacy perceptions are high. Perceptions about procedural justice and legitimacy can predict the willingness of individuals to cooperate with law enforcement (Bradford, Murphy, & Jackson, 2014; D. H. Tyler, Barak, Maguire, & Wells, 2018; White et al., 2016). However, adverse experiences, more so than positive experiences, have a more significant effect on the perceptions toward law enforcement, especially for Latinos and Blacks in urban areas (Theodore & Habans, 2016). Undocumented Latino immigrants tend to have less favorable attitudes toward law enforcement than

nonimmigrant Latinos do because of their fear of deportation (Barboza, Dominguez, Siller, & Montalva, 2017; Roles et al., 2016; Theodore & Habans, 2016). Undocumented immigrants are more likely than documented immigrants or nonimmigrant Latinos to be mistreated by LEOs (Theodore & Habans, 2016). Negative experiences with the police leading to poor perspectives suggest the importance of LEOs to be nonbiased.

Sixty-two percent of individuals who do not see any corruption trust LEOs, and 38% of people do not trust LEOs even if they have not seen any corruption (Mattes, 2016). An increase in perceived procedural justice increases the confidence in law enforcement (Nix, Wolfe, Rojek, & Kaminski, 2015; Taylor, Wyant, & Lockwood, 2015). Procedural justice is essential to the ways that residents perceive LEOs.

The quality of personal interactions with LEOs also influences the ways that residents perceive LEOs. If residents believe that they are being treated unfairly, they may view law enforcement as less efficient and less legitimate, and they may have less confidence in the police (Taylor et al., 2015). Repeated negative interactions will result in residents having less trust in the police (Gau & Brunson, 2015). When such interactions occur, residents tend to believe that LEOs are unworthy of cooperation or compliance (Gau & Brunson, 2015; Maguire et al., 2016).

Urban residents who live in neighborhoods with high crime rates view LEOs as being less capable, a perception that contributes to broad dissatisfaction across the community with the police (Taylor et al., 2015). Many urban residents view some LEOs' demeanor as unnecessarily rough, and when LEOs are agitated or rude, it sets the tone for their interactions with community members (Gau & Brunson, 2015). Residents become

uncooperative and rude in response, and such interactions often occur in neighborhoods with higher crime rates and social disorganization (Gau & Brunson, 2015). Furthermore, officers' use of profanity can lead to negative impressions, leading to an increase in the belief that the police are using excessive force (Patton, 2017).

Adverse experiences have a greater effect than positive experiences on the perceptions concerning law enforcement, especially for Latinos and Blacks in urban areas (Theodore & Habans, 2016). Undocumented Latino immigrants have less favorable attitudes toward law enforcement than nonimmigrant Latinos do because of increased mistreatment by LEOs (Theodore & Habans, 2016). According to Scott, Ma, Sadler, and Correll (2017), there are two reasons that the police shoot a higher number of Black suspects. The first position suggests that the officers may have racial bias, whereas the second position suggests that Black suspects behave differently from White suspects and that officers respond to behavior, not race (Scott et al., 2017). However, even when race-based differences are held constant, Scott et al. suggested that LEOs may be more likely to shoot Black suspects.

Similar incidents such as the shootings in Ferguson, Missouri, and Baltimore, Maryland, have spurred protests. Black residents better understand the causes pertaining to protests and view them more positively than Whites do (Reinka & Leach, 2017). Regardless, people from all races and ethnicities protest if they view LEOs' actions as unjust. Protestors also are more likely to rebel or use violence if they believe that the police are treating other protesters unjustly or violently (Maguire et al., 2016; D. H. Tyler et al., 2018). This thought process is based on the notion that if LEOs treat people

unjustly, they undermine the legitimacy of the law, which then reduces the likelihood that people will cooperate (Maguire et al., 2016). One example occurred in 2011 and 2012, when residents in England rioted, looted, vandalized, committed arson, and attacked police officers after the police had killed a Black man (Morrell & Currie, 2015).

Whites have a more favorable view toward law enforcement than ethnic minorities do. Many residents in low-income urban neighborhoods are ethnic minorities, resulting in a pattern of unfavorable perceptions toward law enforcement in such neighborhoods (Taylor et al., 2015; Wu, 2014). On the other hand, most residents in rural areas are White (Holmes, Painter, & Smith, 2017) low-income earners, with some regions around the United States being worse than others (Mammen, Dolan, & Seiling, 2015). About 15.1% of the rural population and 12.5% of the urban population are considered poor (Mammen et al., 2015), indicating that rural areas tend to have higher poverty rates than urban areas (Donnermeyer, 2015). Similarly, 16% of nonmetropolitan counties and 2% percent of metropolitan counties have high poverty rates (Mammen et al., 2015). In addition, 95% of counties with persistent poverty are in rural areas (Mammen et al., 2015).

Many urban areas with high poverty rates have higher crime rates and negative perceptions toward law enforcement (Corsaro et al., 2015; U.S. Department of Agriculture [USDA], 2016; Webster & Loayza, 2016) than high-poverty rural areas do, which tend to have lower crime rates (Donnermeyer, 2015; Federal Bureau of Investigation [FBI], 2015; Mammen et al., 2015). The presumption has been made that the

cohesiveness and fellowship in rural communities have resulted in lower crime rates (Barclay, 2016; Donnermeyer, 2015).

There also may be issues regarding the ways that police crime statistics are measured and reported. Police crime statistics are measured by police presence, not necessarily the occurrence of crimes (Donnermeyer, 2015). Residents in rural towns notify the police about 74% of the crimes that occur (Kaylen & Pridemore, 2015). The lack of notification may be the result of several reasons: The perpetrator and the victim may know each other; the crime was attempted, but not completed; the victim did not think that the offense was severe; or the crime did not result in injury or financial loss (Green, 2016; Kaylen & Pridemore, 2015; Sidebottom, 2015). In addition, some residents may not trust their local LEOs, or they may not believe that the police can help because of the lack of evidence (Green, 2016; Kaylen & Pridemore, 2015; Sidebottom, 2015).

Criminal motivations also may be different between rural and urban areas. Motivations for crime in rural areas include isolation and the unlikelihood of detection (Barclay, 2016). A sparse population, along with few to no surveillance services, makes it less likely that perpetrators will be caught and gives individuals more opportunities to commit crimes (Ceccato, 2016; Grote & Neubacher, 2016). Similar to the situation in urban areas, in rural areas, children and adolescents commit a significant portion of the crimes. Adolescents become bored, often because of the deficiency of activities or stimuli, so they may turn to drugs or alcohol, or commit crimes (Willging, Quintero, & Lilliott, 2014).

The population and crime statistics in rural areas (FBI, 2015), along with urban residents' perceptions toward law enforcement, have been established. Researchers have shown how race, ethnicity, gender, education level, and income correlate with perceptions toward law enforcement (Corsaro et al., 2015; Webster & Loayza, 2016). Many urban residents have unfavorable views about LEOs, but many of these views have come from low-income, high crime neighborhoods (Corsaro et al., 2015; USDA, 2016; Webster & Loayza, 2016). After searching the literature, I could not determine how rural residents in the United States perceive law enforcement.

Problem Statement

Media attention has been focused on police-related incidents, including police shootings, aggressiveness, civil rights violations, and brutality (M. Barnes, 2017; Downs, 2017; Rector, 2017; Soderberg, 2017; Spencer, 2017). Incidents such as these can contribute to more negative perceptions toward LEOs (Culhane et al., 2016; Gerber & Jackson, 2017; Newport, 2016). Despite the efforts of law enforcement to accommodate the public's demands, such as body-worn cameras, citizens still have negative perceptions of LEOs (Custers & Vergouw, 2015). Available data have indicated that 58% of Whites and 29% of Blacks in urban areas have confidence in law enforcement (Newport, 2016).

It was important to develop an understanding of the factors that correlate with this recognized disparity between races. Most research in this field has focused on urban environments, and the perceptions of residents in rural areas toward law enforcement have not been researched in as much detail (Esh, Byrd, Silvaggio, Bruner, & Williams, 2015; Holmes et al., 2017). More than 19% of the U.S. population lives in rural areas,

which is a considerable portion of the populace (U.S. Census Bureau, 2018). Public safety and LEO safety are compromised when the police lose residents' willingness to comply with LEOs (Gau & Brunson, 2015; Maguire et al., 2016). Having a better understanding of the perceptions of residents in rural areas toward the police and the factors influencing those perceptions may promote positive social change.

Purpose of the Study

The purpose of this quantitative study was to examine the relationship between the DV of rural residents' perceptions toward LEOs and the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status. The rural areas that were the focus of this study included counties containing a principal city between 10,000 and 49,999 residents, and any adjacent county based on workers' commuting patterns or a county without a city of 10,000 people (see Donnermeyer, 2015). Many rural communities have homogeneous populations; however, communities are becoming more diverse because of the number of immigrants settling in nonurban communities (Webster & Loayza, 2016). Ethnic minorities in rural areas have different experiences than those in urban areas, which also may affect their perceptions toward LEOs (Jones, 2016).

A questionnaire was disseminated to measure the relationship of the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs. The results were compared to results from studies conducted in urban

regions to identify any significant differences in the ways that law enforcement was perceived between urban and rural areas.

Research Questions and Hypotheses

The following research questions (RQs) and hypotheses guided the study:

RQ1: What is the relationship between age and rural residents' perceptions toward LEOs?

H_{01} : There is no significant relationship between age and rural residents' perceptions toward LEOs.

H_{a1} : There is a significant relationship between age and rural residents' perceptions toward LEOs.

RQ2: What is the relationship between gender and rural residents' perceptions toward LEOs?

H_{02} : There is no significant relationship between gender and rural residents' perceptions toward LEOs.

H_{a2} : There is a significant relationship between gender and rural residents' perceptions toward LEOs.

RQ3: What is the relationship between ethnicity and rural residents' perceptions toward LEOs?

H_{03} : There is no significant relationship between ethnicity and rural residents' perceptions toward LEOs.

H_{a3} : There is a significant relationship between ethnicity and rural residents' perceptions toward LEOs.

RQ4: What is the relationship between religion and rural residents' perceptions toward LEOs?

H_{04} : There is no significant relationship between religion and rural residents' perceptions toward LEOs.

H_{04} : There is a significant relationship between religion and rural residents' perceptions toward LEOs.

RQ5: What is the relationship between marital status and rural residents' perceptions LEOs?

H_{05} : There is no significant relationship between marital status and rural residents' perceptions toward LEOs.

H_{a5} : There is a significant relationship between marital status and rural residents' perceptions toward law enforcement officers.

RQ6: What is the relationship between sexual orientation and rural residents' perceptions toward LEOs?

H_{06} : There is no significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

H_{a6} : There is a significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

RQ7: What is the relationship between income and rural residents' perceptions toward LEOs?

H_{07} : There is no significant relationship between income and rural residents' perceptions toward LEOs.

H_{a7} : There is a significant relationship between income and rural residents' perceptions toward LEOs.

RQ8: What is the relationship between employment status and rural residents' perceptions toward LEOs?

H_{08} : There is no significant relationship between employment status and rural residents' perceptions toward LEOs.

H_{a8} : There is a significant relationship between employment status and rural residents' perceptions toward LEOs.

RQ9: What is the relationship between educational attainment and rural residents' perceptions toward LEOs?

H_{09} : There is no significant relationship between educational attainment and rural residents' perceptions toward LEOs.

H_{a9} : There is a significant relationship between educational attainment and rural residents' perceptions toward LEOs.

RQ10: What is the relationship between immigration status and rural residents' perceptions toward LEOs?

H_{010} : There is no significant relationship between immigration status and rural residents' perceptions toward LEOs.

H_{a10} : There is a significant relationship between immigration status and rural residents' perceptions toward LEOs.

Theoretical Framework

The theoretical bases for this study were the social judgment theory (Brunswik, 1952; Hammond, 1955; Hammond et al., 1975; Sherif & Hovland, 1961) and the primary socialization theory (Oetting et al., 1998; Parsons, 1951). Both approaches describe individuals' perceptions of situations based on their current beliefs. The social judgment theory combines environment with current perceptions and values. The theory is based on the ways that environment, perceptions, and values determine how individuals respond to new ideas or occurrences. Current beliefs can determine how likely it is for individuals to change their perceptions, as well as the conditions needed for the perceptions to change. People from the same culture, religion, or race may believe differently because of the many factors affecting their perceptions (Oetting et al., 1998).

According to the primary socialization theory, all human social behaviors are learned from family members, friends, school, and the media (Oetting et al., 1998). Both theories indicate how environment affects individuals' beliefs concerning what they see and hear. Other researchers have shown the ways that culture, age, relationships, ethnicity, peers, the media, and the Internet can influence individuals' perceptions (Epley & Gilovich, 2016; Greenwood, Sorenson, & Warner, 2016; Payne & Dal Cin, 2015; Vogel & Wanke, 2016; Wu, Lake, & Cao, 2015). Support for the police can be divided into two aspects: efficacy and image. Efficacy refers to the ways that residents perceive LEOs' effectiveness when performing their duties, whereas image refers to how approachable and fair residents perceive LEOs to be (Nadal & Davidoff, 2015). The results gleaned from this study offered additional insight into the perceptions toward law

enforcement in the United States, but the focus of the study was on the perceptions of residents living in rural areas rather than urban areas. The theoretical framework is discussed in more depth in Chapter 2.

Nature of the Study

Data were collected using the Perceptions of Police Scale (POPS), a cross-sectional survey (Nadal & Davidoff, 2015), to examine the relationships between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs in English (see Appendix A) and Spanish (see Appendix B). The demographic questionnaire was included as part of the POPS. An Internet-based survey was administered for several reasons: access to a more substantial portion of the population, low cost, and convenience. Perceptions were captured and measured using the POPS (see Nadal & Davidoff, 2015). Participants responded to statements using a Likert-type scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). For data analysis, the Likert scale was scaled between -2 and +2. "I strongly agree" was rated as +2, "indifferent" was rated as 0, and "I strongly disagree" was rated as -2. I received permission from Nadal and Davidoff to use the POPS (see Appendix C).

Residents in urban areas tend to have negative perceptions about law enforcement, but there has been a gap in the literature regarding the ways in which residents in rural areas perceive law enforcement (Corsaro et al., 2015; USDA, 2016; Webster & Loayza, 2016). Determining how a sample of residents in rural areas perceived law enforcement may contribute to the conversation about the relationship

that LEOs have with the communities they serve. The focus of this study was to determine how the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status correlated with the DV of rural residents' perceptions toward LEOs.

Definitions of Terms

Law enforcement officer (LEO): Any member from an organization with the authority to enforce laws by deterring, rehabilitating, or punishing people who break the law. Officers include members of local police departments, sheriff's departments, state patrol, and any other state or federal law enforcement entity (Bureau of Justice Statistics, 2017).

Rural: Counties containing a principal city between 10,000 and 49,999 residents and any adjacent county based on workers' commuting patterns or a county without a city containing 10,000 people (Donnermeyer, 2015). Many residents in southeastern Colorado are dependent upon agriculture, no town contains more than 8,000 residents, and only three towns having more than 2,500 residents. Therefore, southeastern Colorado is considered a rural region of the state.

Southeastern Colorado: Data were collected from residents living in rural areas in southeast Colorado. Southeastern Colorado is defined as 39°N longitude to the southern Colorado state border and 104°W latitude to the eastern Colorado state border.

Assumptions

The first assumption was that the participants would answer the survey items honestly. Participants received a letter explaining that their identities and responses would

remain anonymous. The second assumption was that the POPS would accurately measure which factors correlated with residents' perceptions about LEOs (Nadal & Davidoff, 2015). Results from prior research testing indicated that Nadal and Davidoff (2015) had created a reliable and valid instrument. The final assumption was that this study would contribute to the literature regarding perceptions toward law enforcement, specifically the perceptions of residents in rural areas.

Scope and Delimitations

Researchers have focused on urban areas, but rural areas of southeastern Colorado were the focus of this study in an effort to fill the identified literature gap. This study was conducted to identify a possible correlation between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions of LEOs. Accounts of police shootings have been and continue to be broadcast by the news media. Most of these shootings have occurred in urban areas. Results of previous studies have indicated a correlation between perceptions and factors related to urban areas; however, correlations between perceptions toward police and factors in rural areas have not been examined. This gap in information was the reason for a sample of participants from a rural area rather than an urban area being surveyed.

Developers and proponents of the social judgment theory (Brunswik, 1952; Hammond, 1955; Hammond et al., 1975; Sherif & Hovland, 1961) and the primary socialization theory (Oetting et al., 1998; Parsons, 1951) have discussed ways that the environment in which people grow up may affect their beliefs. Based on this assertion,

residents from urban areas may have different beliefs because they were raised in different environments compared to those from rural areas. Because the literature had abundant information about perceptions in urban areas, the next step was to look at associations related to the perceptions of residents living in rural areas. One goal of this study was to make the results generalizable to populations in rural areas around the United States despite differences in rural areas between and among regions of the United States (see Lichter, 2012). An Internet-based survey was chosen over other collection methods because of its convenience. Rural areas have sparse populations covering large areas, so an Internet-based survey gave more people the opportunity to participate in this study. The higher number of participants was more representative of the target population.

Limitations

Different limitations existed in this study. The first limitation was my potential relationships with some participants. Because this study was conducted near my residence, some participants could have known me personally. However, this knowledge did not affect their answers. One advantage to knowing many people in the area was having access to a larger portion of the Latino population and the ability to obtain a more representative sample. If a sufficient number of Latino participants had not been obtained, then the sample would not have been representative of the target population and could have posed a threat to validity.

Another limitation was that if LEOs had completed the survey, the responses could have been biased favorably toward LEOs. Although the survey was meant to be completed by non-LEOs, I had no way of knowing whether any LEOs completed the

survey. Another limitation was the Internet-based nature of the POPS, which gave the participants the opportunity to complete it more than once. In addition, people who did not have Internet access did not complete the survey, which reduced the representative nature of the sample. Results of the study were generalizable only to residents living in rural areas.

Significance

Unfavorable perceptions toward law enforcement have caused many people to judge LEOs' actions negatively based on what they have heard and without knowing details about the circumstances (Carson, 2015). Most research about perceptions toward law enforcement has been conducted in urban areas and has indicated that people have negative views about LEOs (Corsaro et al., 2015). This study addressed the gap in understanding the ways in which rural people perceive LEOs. The minority populations in urban areas are high, with a higher number of Blacks (U.S. Census Bureau, 2018). This study had a sizeable number of White ($n = 237$) and Latino ($n = 33$) participants but few Black ($n = 3$), American Indian ($n = 3$), Multiracial ($n = 2$), or Other ($n = 2$) participants because of the area in which the study was conducted (see U.S. Census Bureau, 2018). The final sample size was 282 participants, but two participants did not indicate their ethnicity. The higher number of Latinos in southeastern Colorado might allow future researchers to use the results to examine the ways in which Latinos in rural areas, compared to those in urban areas, perceive law enforcement. Previous studies have shown supportive perceptions for law enforcement in rural areas, but they were

conducted outside of the United States (Nalla, Mesko, & Modic, 2016; Perkins, 2016; Wooff, 2015).

The unique contribution of this study stemmed from its results, which were intended to contribute to the limited literature about the perceptions of rural residents in the United States toward LEOs. Just as there are differences between and among urban communities, there are regional differences between and among rural communities (Woodard, 2011). The results of this study cannot be applied to all rural areas, but they are a step forward in understanding rural perceptions toward law enforcement. Future researchers may compare the results of this study to the results of studies conducted in urban communities. Regardless of whether LEOs are perceived positively or negatively by residents of rural areas, insights gained from this study may contribute to positive social change.

Summary

Several negative police-related incidents have been featured in the news media, including shootings (Downs, 2017; Rector, 2017) and brutality-related incidents (M. Barnes, 2017; Spencer, 2017). These incidents have created hostile feelings toward law enforcement (Culhane et al., 2016; Newport, 2016). Police departments have made accommodations to improve residents' perceptions about them (Custers & Vergouw, 2015). However, although the literature on the perceptions of urban residents has been abundant, rural residents' perceptions have remained relatively unknown (Esh et al., 2015). Commonly studied variables have included, but have not been limited to, demographic factors of age, gender, ethnicity, religion, marital status, sexual orientation,

income, employment status, educational attainment, and immigration status. The quantitative methodology selected for this study facilitated the analysis of the relationships between the 10 IVs and the DV.

The social judgment theory and the primary socialization theory served as the theoretical bases of this study and contributed to understanding how perceptions are developed and later challenged. The assumptions, delimitations, and limitations of the study were discussed in Chapter 1. Lastly, the significance of the study indicated how these perceptions could contribute to social change by helping LEOs to better understand the residents whom they serve. This study may lead to a deeper understanding of the perceptions of residents in rural areas toward law enforcement.

Chapter 2 contains a review of the theoretical framework and relevant literature. Search strategies and key terms for the literature review are included. Much of the literature in Chapter 2 is from urban areas because of the dearth of literature about rural communities. The limited research on the variables is discussed, including known relationships between variables and perceptions.

Chapter 2: Literature Review

Many news stories and social media posts have featured police-related incidents, including shootings by the police (Downs, 2017; Rector, 2017); aggressiveness (Soderberg, 2017); civil rights violations; and brutality (M. Barnes, 2017; Spencer, 2017). Incidents such as these can contribute to lower perceptions toward law enforcement (Culhane et al., 2016; Gerber & Jackson, 2017; Newport, 2016). Despite the efforts of law enforcement to accommodate public demands (Custers & Vergouw, 2015), such as the use of mandatory body cameras, there are still negative attitudes toward LEOs. The focus of most research in this field has been on the perceptions of urban residents toward law enforcement (Afon & Badiora, 2016; Corsaro et al., 2015; Graif et al., 2014; McNeeley & Grothoff, 2016), but the perceptions of rural residents toward LEOs have not been researched sufficiently in the United States (DeKeseredy, 2015; Esh et al., 2015; Holmes et al., 2017).

This chapter contains a review of literature on the relationships between the selected variables and public perceptions toward law enforcement. The IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status were the focus of this study. Previous applications of the chosen theories were considered during the selection process. The social judgment theory and the primary socialization theory have been used to describe the ways that people's beliefs are developed. These theories also show how people respond to certain stimuli based on their beliefs. The purpose of this chapter is to review

the available literature on the perceptions of residents in urban and rural areas toward LEOs.

Literature Search Strategy

Many academic journals have been dedicated to or have been heavily focused on law enforcement, as well as the public relations concerning law enforcement. Perceptions and attitudes toward LEOs have been common research topics, but a considerable amount of the research has been conducted in urban areas. Literature regarding the perceptions of rural residents toward LEOs was reviewed in this chapter. Google Scholar and databases available from Walden University's library were used to search for relevant literature. These databases included PsycINFO, PsycARTICLES, and Thoreau Multi-Database Search.

Searches were conducted combining words such as *police*, *law enforcement*, *perceptions*, *attitudes*, *rural*, and *county*. Combinations included *police* or *law enforcement* and *perceptions* or *attitudes*, as well as *police* and *perceptions* and *rural*. Additional terms used in the search for literature included *religion*, *race*, *ethnicity*, *age*, *minority*, *gender*, *sexual orientation*, *occupation*, and *education*. Searches were limited to articles published between 2014 and 2019, but several sources outside of this range were cited when relevant literature could not be found. Peer-reviewed journal articles were the major source of research to ensure the information's credibility. Additional literature came from other sources, including news articles, *Police Quarterly*, published books, U.S. Census Bureau, and the USDA. Most of the literature contained research on the attitudes and perceptions of residents in urban areas, not rural areas, toward law

enforcement. Literature in areas such as religion and occupation was limited, so the scope of the search was expanded to find related literature.

Theoretical Foundation

Social Judgment Theory

Probabilistic functionalism by Brunswik (1952) is the theoretical groundwork of the social judgment theory. Under probabilistic functionalism, perceptions are affected by environmental cues that individuals select as their responses. Brunswik (1955) argued that individuals and the environments in which they reside should receive equal attention. Brunswik asserted that environmental cues might be correlated and possibly redundant, thereby complicating decision making. According to probabilistic functionalism, perceptions are not objective; instead, they are probabilistic, resulting in uncertainty in the ways that individuals interpret cue information (Hall & Oppenheimer, 2015). In addition, probabilistic functionalism views humans as being able to adapt to and learn to function in dynamic environments (Hall & Oppenheimer, 2015). Brunswik's (1955) ideas have been expanded upon by such researchers as Hammond (1955) and Hammond et al. (1975).

The social judgment theory was adapted from its original use in a clinical orientation (Hammond, 1955) to describe the ways that perceptions are influenced by cues from the environment outside of the clinical setting (Hammond et al., 1975; Hammond, McClelland, & Mumpower, 1980) and how attitudes affect judgment toward others (Sherif & Hovland, 1961). Objectives of the social judgment theory are to determine how attitudes are relevant to environment, understand what contributes to

human judgment, and develop methods for improving human judgment (Hammond et al., 1975). The main contribution of the social judgment theory to research has been as a framework to analyze individuals' decisions and provide insight into how their judgment is influenced (Hall & Oppenheimer, 2015).

Sherif and Hovland (1961) explained the ways that people evaluate their environments and change their perceptions based on their social interactions with others. Individuals' tolerance of stimuli and the environment affect perceptions. This means that when presented with others' opinions, individuals will determine if those opinions are acceptable based on their own perceptions. Simply stated, the social judgment theory, which is based on personal judgment, has three zones: latitude of acceptance, latitude of rejection, and latitude of noncommitment (Sherif & Hovland, 1961). People have a range in which they will accept or reject information based on their beliefs (Chau, Wong, Chow, & Fung, 2014). The most effective method to persuade individuals of other opinions is to present the opinions close to the boundary of the individuals' opinion acceptance range (Chau et al., 2014).

M. J. Lee and Chun (2016) applied the social judgment theory to assess how online comments and public opinion polls could affect the acceptance of others' comments online, along with attitudes toward a company. M. J. Lee and Chun found that negative online comments were more accepted by participants who had prior negative attitudes rather than positive attitudes. This finding was similar to what Sherif and Hovland (1961) reported to explain how people judge others based on their own beliefs. The range of acceptance depends on individuals' beliefs and the range that they find

acceptable based on those beliefs. When individuals' opinions are similar to those of other individuals, those opinions are accepted, but when the opinions are outside the acceptable range, they are rejected (Sherif & Hovland, 1961). M. J. Lee and Chun concluded that the social judgment theory is applicable to the ability of social media to change attitudes because the theory uses individuals' attitudes as a reference point to judge others' attitudes.

Sung and Lee (2015) examined the effect of online comments on individuals' attitudes toward organizations. Sung and Lee found that individuals who had negative attitudes before the study changed their attitudes after reading others' two-sided comments. Sung and Lee concluded that this shift in attitude might have occurred because the individuals were more accepting of two-sided comments rather than one-sided comments. Displaying two-sided comments can influence people to change their attitudes about something. For example, law enforcement could use this information to educate the public and change negative attitudes to positive attitudes.

Rossi, Pickering, and Byrne (2016) surveyed residents living near national parks to assess their perceptions toward activities available for visitors. Rossi et al. found that the participants who felt stronger about the parks had more favorable perceptions toward nonmotorized activities and negative perceptions toward motorized activities. These residents had a small range of acceptance for visitor activities, which meant that motorized activities were outside this range (Rossi et al., 2016). Another study was conducted to examine the nature of political topics and determine the width of participants' latitudes (McCroskey & Burgoon, 1974). Results indicated that the

participants had invariant widths of latitudes of rejection and acceptance across topics and sources (McCroskey & Burgoon, 1974).

People have varying beliefs and different ranges as to what information they will accept or reject. Some individuals may perceive comments or actions differently from reality. Regardless of how close or far the comments are from individuals' perceptions, they can have implications for individuals' perceptions toward others (McCroskey & Burgoon, 1974). One example is law enforcement. The manner in which individuals perceive information that they are exposed to in the media will influence their perceptions of LEOs (Greenwood et al., 2016; Vogel & Wanke, 2016) depending upon their latitude of acceptance or rejection. Individuals' latitude of acceptance could be influenced by the information's source or credibility, lack of information, and individuals' previous experiences with LEOs (McCroskey & Burgoon, 1974).

Similar to the perceptions of residents in urban areas toward LEOs, perceptions of residents in rural areas also are formed by social factors that include, but are not limited to, family members, friends, personal experiences, and exposure to information on television or the Internet (Epley & Gilovich, 2016; Greenwood et al., 2016; Payne & Dal Cin, 2015; Vogel & Wanke, 2016; Wu et al., 2015). Other factors include perceptions pertaining to community safety, police legitimacy, and social integration of LEOs (Dennis, 2015; Holmes et al., 2017; Van Damme & Pauwels, 2016). Even when perceptions are distorted, they become real for the individuals holding those perceptions (Mattes, 2016).

These perceptions, as indicated by the social judgment theory, can influence the manner in which people process new information. The theory also demonstrates how people react to information by accepting it, rejecting it, or refusing to let it alter their perceptions. The social judgment theory has been used to explain the ways that attitudes are judged and modified by individuals' environments and other conditions. The survey in the current study was used to analyze residents' perceptions toward LEOs and the factors correlated with those perceptions.

Primary Socialization Theory

Social sciences played an essential role in the establishment of the systems theory. The most influential concepts included comprehensive sociological versions of the systems theory proposed by Parsons since the 1950s and Luhmann since the 1970s. The version developed by Parsons (1951) was used in this study. The primary socialization theory was derived from the work of Parsons, which was still only theoretical at the time. Parsons, who wanted to develop a theory to explain all behavior, called the theory structural functionalism.

Under structural functionalism, values are considered the core of culture (Parsons, 1966). Parsons (1961) stated that society develops norms and behaviors that it finds acceptable. Many sociologists have criticized Parsons (1961) and structural functionalism because Parsons did not account for social change, financial struggles, or social oppression (Bourdieu & Wacquant, 1992; Clark, 1972). Structural functionalism has been criticized because functionalists have not offered alternatives to the family role, such as other institutions performing the functions fulfilled by the family (Bourdieu & Wacquant,

1992). Similarly, functionalists have been pessimistic about the family that they have portrayed as being too different from reality (e.g., broken homes, single-parent households, poverty; Bourdieu & Wacquant, 1992). Parsons (1961) argued that even though individuals could fill any roles, they are still expected to conform to the social norms of these roles.

In addition, individuals can fulfill multiple roles at the same time. Parsons (1966) understood that some societies, such as U.S. society, have cultural influences that continue to alter values. However, structural functionalism did not account for differences in gender, race, or class. At the time, structural functionalism was the dominant sociological perspective on education (Van Krieken et al., 2014). Schools taught students the importance of society's values and prepared them to accept their roles in society (Parsons, 1961). Parsons supported individuals finding out how they fit into society. As society changes, individuals can express themselves in more individualistic ways.

Primary socialization occurs during childhood and is affected by the family unit. Parsons (1961) viewed the family as one of the most influential factors during primary socialization by teaching children the societal and cultural standards to guide them through their adult life. People learn behaviors at a young age. Family, friends, and school are the three primary groups shaping adolescents' behaviors, values, attitudes, and beliefs (Oetting & Donnermeyer, 1998; Oetting et al., 1998).

Family communication processes play a significant role in adolescents' lives. These processes can influence prosocial or delinquent behavior such as substance abuse (Oetting & Donnermeyer, 1998; Oetting et al., 1998). The primary socialization theory

highlights these processes and states that if adolescents do not bond enough with their parents or school, they are more prone to engage in delinquent behavior (Higgins, Ricketts, Marcum, & Mahoney, 2010). The primary socialization theory focuses on the family, suggesting that if parents and youth bond, youth will be more unlikely to exhibit delinquent behavior (Pettigrew, Shin, Stein, & Van Raalte, 2017).

A major aspect of learning societal or cultural standards is learning to respect authority figures, such as teachers, principals, employers, and LEOs (Parsons, 1961). Adolescence is the primary socialization period for attitude development toward the law (T. R. Tyler, 2015). Adults might change their perceptions later, but the initial influences can still affect perceptions. The proportion of youth versus adults who commit crimes is relatively high, which means that many adolescents' initial contact with LEOs is after they have committed crimes (T. R. Tyler, 2015). It is not always the frequency of contact, but whether the individuals have felt that they were treated fairly by the police (T. R. Tyler, Fagan, & Geller, 2014). Negative consequences are more severe when contact with LEOs occurs repeatedly (T. R. Tyler, 2015). However, if adolescents are left alone, most of them will mature into law-abiding adults (Steinberg, 2014).

Romain and Hassell (2014) assessed the socialization sources that can influence juveniles' perceptions. These sources include peers, neighbors, and the media. Romain and Hassell found that primary sources (i.e., family members and peers), neighbors, and negative comments about the police did not significantly affect juveniles' attitudes toward the police. However, juveniles were more likely to have negative perceptions toward the police if their friends also held negative perceptions. Secondary sources of socialization

(e.g., television and music) did not significantly affect their perceptions toward the police (Romain & Hassell, 2014), a result that was not found in other studies (Boivin, Gendron, Faubert, & Poulin, 2017; Parry, 2017).

Sindall, McCarthy, and Brunton-Smith (2017) concluded that parents had a significant influence on juveniles' perceptions toward LEOs. Sindall et al. conducted a survey with youth ages 10 to 15 years. Results indicated less than 5% of youths had negative perceptions toward LEOs, 42% had neutral views, and 53% held positive views (Sindall et al., 2017). Despite these results, Sindall et al. focused on the reasons for the perceptions. Children's views were similar to those of their parents. When parents had positive views toward the police, the children were 30% more likely to have positive views. The children of parents who had been victimized had more negative perceptions toward the police, but their views were more favorable if the parents were married. As the children grew older, their views toward law enforcement more closely resembled those of their parents (Sindall et al., 2017).

Sindall et al. (2017) provided additional details about the views of youth toward the police. Confidence in the police was generally higher among young female participants. Older children had less confidence in the police, with a 20% decrease for each year in age. Similar to the results in adult studies, youth who saw the police regularly held more positive views, and children who had been victimized in the previous year had lower confidence in law enforcement. Sindall et al. found no differences between the views of minority children and White children or between rural and urban areas.

Wang, Yu, and Wei (2012) studied the ways that individuals on social media influenced their peers' attitudes toward consumer products. Next to family members, peers are the leading primary socialization agents and can affect attitudes toward any products or topics (Kam & Wang, 2015). Consumers who discuss products with peers may influence attitudes toward those products. Wang et al. found that peer communication through social media did affect attitudes toward products. These results were similar to those in other studies showing how social media could affect attitudes toward LEOs (Grimmelikhuijsen & Meijer, 2015; Wolfe & Nix, 2016).

Children's beliefs are impacted easily by social interactions and stimuli. These initial beliefs can then influence children's perceptions toward LEOs. If adult family members have negative perceptions toward or interactions with law enforcement, the children also might grow up with negative perceptions toward LEOs (Dennis, 2015; Radford & Hester, 2015). The primary socialization theory holds that what children are exposed to influences their beliefs as adults. This notion makes it important for LEOs to have positive interactions with children and their families. Positive interactions can increase the likelihood that children will grow up with favorable perceptions toward LEOs.

Summary

According to the social judgment theory and the primary socialization theory, individuals perceive situations based on their current patterns of belief and attitudes (Brunswik, 1952, 1955). Environment, current perceptions, and values are components of the social judgment theory (Hammond et al., 1975, 1980). According to the theories,

these factors determine individuals' responses to new ideas or occurrences. Current perceptions can determine how likely it is for individuals to change their perceptions, as well as the conditions needed for the perceptions to change (Sherif & Hovland, 1961). People from the same culture, religion, or race can have different perceptions based on a variety of factors (Oetting et al., 1998). The primary socialization theory posits that all human social behaviors are learned from family members, friends, school, and the media (Epley & Gilovich, 2016; Greenwood et al., 2016; Payne & Dal Cin, 2015; Vogel & Wanke, 2016; Wu et al., 2015).

Both theories have indicated how the environment affects perceptions related to what individuals see or hear. Knowing the environment allows individuals to understand how aspects such as culture, age, relationships, ethnicity, peers, the media, or the Internet affect views. Previous results have confirmed how these aspects can influence individuals' perceptions positively or negatively (Epley & Gilovich, 2016; Greenwood et al., 2016; Payne & Dal Cin, 2015; Vogel & Wanke, 2016; Wu et al., 2015). The current study not only offered additional insight into the perceptions toward LEOs in the United States, but also focused on law enforcement in rural areas rather than urban areas.

Literature Review

Perceptions and Attitudes

Individuals' experiences with LEOs have shaped their perceptions toward LEOs (Theodore & Habans, 2016). Individuals who have had negative experiences with LEOs could perceive all LEOs as being bad. Even when LEOs are respectful during interactions, the individuals could claim otherwise. One example was a woman who

alleged that a state trooper sexually assaulted her during a traffic stop (Rojas, 2018). The trooper suspected the woman of driving while intoxicated, determined that she was intoxicated, and arrested her (Rojas, 2018). When investigators reviewed the footage from the body camera that the trooper was wearing, they found the woman's claim to be untrue (Rojas, 2018). The trooper had remained respectful and professional during the entire interaction with the woman.

Interactions with police are not the only factors that contribute to perceptions regarding LEOs. Neighborhoods whose residents have high educational levels, more income, and are older are generally more satisfied with LEOs (Afon & Badiora, 2016; McNeeley & Grothoff, 2016). Many neighborhoods whose residents live in poverty have higher crime rates (Graif et al., 2014; Patel, 2014), and stealing often is viewed as a necessary source of income (Patel, 2014). Low-income, high-crime neighborhoods have negative perceptions toward LEOs (Corsaro et al., 2015) because the residents believe that the police treat them unfairly, possibly as the result of their frequent and often negatives encounters with LEOs (Gau & Brunson, 2015).

Researchers have identified procedural justice and legitimacy perceptions as predictors of the willingness to cooperate with law enforcement (Bradford et al., 2014; D. H. Tyler et al., 2018; White et al., 2016). When citizens believe that LEOs do not practice procedural justice, they are less likely to cooperate. Procedural justice is a way for individuals to view police legitimacy by judging how residents are treated by LEOs (Van Craen & Skogan, 2017). Procedural justice also involves treating residents with respect and politeness, and being accountable for officers' actions (Van Craen & Skogan, 2017).

The media can affect residents' perceptions toward LEOs (E. J. Lee et al., 2017), but they can also affect LEOs' perceptions toward residents and communities. Nix and Pickett (2017) surveyed a sample of LEOs and explored the possible effects of the media and third-person perceptions on the perspectives toward LEOs. The majority (83%) of the officers whom Nix and Pickett surveyed believed that unfavorable media coverage about the police increased crime rates. Hostile media perceptions also increased the likelihood that the LEOs believed that residents' attitudes toward police had worsened and that residents had become more resentful, distrustful, and disrespectful (Nix & Pickett, 2017). The police officers also had become more fearful about having false allegations brought against them via the media. This fear made the LEOs more hesitant to perform their duties (Nix & Pickett, 2017). James Comey, former FBI director, also believed that LEOs across the United States had become more hesitant to perform their duties (Nix & Pickett, 2017).

Different forms of media, especially those containing videos, can influence residents' beliefs (Boivin et al., 2017; Parry, 2017). Videos from any platform can influence perceptions supporting or opposing the police. The participants in Parry's (2017) study who viewed positive interactions between officers and residents had higher perceptions regarding procedural justice. Unlike the participants who watched the control video, these other participants also believed that police misconduct occurred less frequently (Parry, 2017). Videos that showed the use of force and negative interactions were associated with lower police legitimacy and less trust in the police and procedural justice.

The participants in Parry's (2017) study believed that police misconduct occurred more often than not. Participants who watched criminal justice news stories had lower fairness scores. A college education was associated with lower beliefs in procedural justice and overestimations about police misconduct (Parry, 2017). Boivin et al. (2017) had similar results. Boivin et al. found that participants who watched fictional videos about controversial police interactions were more likely to believe that LEOs frequently used force. Clearly, secondary sources have been able to influence perceptions toward LEOs.

Efficacy and Image

Support for the police can be categorized along the dimensions of efficacy and image. Efficacy refers to the perceptions of residents toward the effectiveness of LEOs when they are performing their duties, whereas image refers to how approachable or fair residents perceive LEOs to be (Nadal & Davidoff, 2015). The perceived fairness of treatment and the effectiveness of LEOs are two critical factors affecting residents' views about law enforcement (Gau & Brunson, 2015; Taylor et al., 2015). Residents have decreased faith in police efficacy if they have been the victims of crime or are more fearful about ensuing crimes (Luo, Ren, & Zhao, 2017). Mattes (2016) asserted that 23% of people who see high levels of corruption trust the police, a percentage indicating that the majority of people (77%) who see corruption do not trust the police. Sixty-two percent of individuals who do not see any corruption trust the police (Mattes, 2016), meaning that 38% of people still do not trust the police, even if they have not seen any corruption.

An increase in perceived procedural justice tends to increase the confidence in law enforcement. However, if residents feel that they are being mistreated, they will view LEOs as less efficient and will have less confidence in LEOs (Taylor et al., 2015). Residents who have repeated negative interactions with the police also will mistrust them (Gau & Brunson, 2015). Even reporting crimes has been associated with lower satisfaction (De Angelis & Wolf, 2016). Urban residents who live in high-crime neighborhoods view LEOs as less capable, which decreases residents' satisfaction with the police (Taylor et al., 2015). Residents distinguish between the police in general and the police in their neighborhoods (Luo et al., 2017). Residents are observant enough to recognize the efficacy and procedural justice of the police in their neighborhoods compared with the police in general.

People from all races and ethnicities will protest if they view LEOs' actions as unjust. In addition to previously mentioned incidents in Missouri, North Carolina, and Maryland, people in England rioted, looted, attacked police officers, committed arson, and vandalized property in 2011 and 2012 after the police had killed a Black male individual (Morrell & Currie, 2015). Protestors are more likely to rebel and use violence if they believe that the police are treating protesters in an unjust or violent manner, such as engaging in police brutality or abusing their authority (Maguire et al., 2016; D. H. Tyler et al., 2018). LEOs undermine the legitimacy of the law when they treat people unjustly (Maguire et al., 2016). The likelihood that people will cooperate is reduced when they believe that LEOs are treating other residents unjustly (Maguire et al., 2016).

Residents' perceptions toward the lawfulness of officers' actions are important, but these perceptions do not always reflect LEOs' actions being within the confines of the law. Meares, Tyler, and Gardener (2016) noted that procedural justice was more influential than the legality of the behavior of the police in determining residents' perceptions. Meares et al. argued that people base their understanding of lawfulness on police procedural justice. When people feel that LEOs are treating them fairly, they are less likely to believe that LEOs have profiled them (Meares et al., 2016). Nadal, Davidoff, Allicock, Serpe, and Erazo (2017) reported that 28% of their participants stated that LEOs had unfairly stopped them. Illegal conduct lowers the perceptions that the police are using appropriate procedures (Meares et al., 2016). The public make conclusions about the legality of police behavior based on previous behavior, not lawfulness (Meares et al., 2016). Even if LEOs perform their duties lawfully, residents may still judge them based on the previous actions of other LEOs. Residents' views are based on procedural justice, but this assertion does not mean that the legality of LEOs' actions should not be considered when determining perceptions.

Improved police training is one focus of advocacy for the better treatment of residents, especially ethnic minorities. However, police training still encourages officers to look for suspicious activity, which can lead to inherent biases being exposed in the line of duty. As a result, there is already a sense of mistrust and suspicion when people and police interact. Positive interactions between LEOs and residents are becoming increasingly important because of the increase in cell phone usage and LEOs' body-worn cameras. More interactions are being recorded and posted online for people to see

(Meares et al., 2016). Most people believe that body-worn cameras will improve the behaviors of the police (87.1%) and residents (79.4%; Crow, Snyder, Crichlow, & Smykla, 2017). Most residents also believe that body-worn cameras will improve the views facing police legitimacy (77.6%) and the collection of evidence (88.5%; Crow et al., 2017). In short, because people do not know the law, they use fairness to evaluate police behavior. LEOs must follow the law, but they also need to treat people in ways that the average citizen would consider fair and respectful.

Nix et al. (2015) identified fairness as a critical factor in establishing trust in the police. Neighborhoods with signs of disorder resulting from a lack of efficacy increase the likelihood of residents perceiving LEOs as unjust, regardless of prior contact and victimization, perceptions regarding injustice, and demographic differences (Nix et al., 2015). If community members distrust the police, this situation can undermine the legitimacy of LEOs, who then lose their ability and authority to function effectively (National Institute of Justice, 2016).

De Angelis and Wolf (2016) commented that residents had higher satisfaction rates with the police when they felt safe, were more satisfied with the perceived accountability, and had a strong sense of community. Older residents have tended to perceive LEOs as fairer and have been more satisfied with the police (De Angelis & Wolf, 2016; Nix et al., 2015). Nix et al. (2015) reported that racial minorities had less trust in the police. Individuals who perceived more incivilities in their neighborhoods and had a lack of social cohesion also tended to have less trust in the police (De Angelis &

Wolf; Nix et al., 2015). Recent crime victims also have tended to have lower levels of satisfaction with law enforcement (De Angelis & Wolf, 2016).

People who lived near violence were more likely to see the responses of LEOs to crime, thus increasing residents' confidence in the police (Zahnow, Mazerolle, Wickes, & Corcoran, 2017). Confidence in the police decreased 3% for every 1 kilometer that a citizen's residence was from recent violent crime (Zahnow et al., 2017). In rural areas, residences can be far apart because of the small populations sizes and their broad distribution, making living near violence and witnessing police responses to violence less frequent, with the result being fewer opportunities for rural area residents to develop greater confidence in the police.

Zahnow et al.'s (2017) results contradicted those of other studies (Corsaro et al., 2015; Miller & D'Souza, 2016). Zahnow et al.'s results indicated that perceived safety and contact with the police were positively associated with confidence in the police. Corsaro et al. (2015) and Miller and D'Souza (2016) found that increased contact with the police decreased positive perceptions toward LEOs. Results of Zahnow et al.'s study were similar to other studies (Nix et al., 2015; Taylor et al., 2015) in that perceived neighborhood disorder lowered confidence in the police. Participants who were older, female, and married had greater confidence in the police (Zahnow et al., 2017).

Personal interactions with LEOs have the strongest impact on people's perceptions, both positive and negative, toward the police (Afon & Badiora, 2016; Philpott, 2016) People judge the police based on how they behave and interact with residents (Radburn, Stott, Bradford, & Robinson, 2018). If residents feel that they have

been treated unfairly, they will have negative perceptions about LEOs (Gau & Brunson, 2015). Residents also will view LEOs as less legitimate and believe LEOs as being incapable of cooperation or compliance (Maguire et al., 2016). The process and the interaction are more important than the outcome (Philpott, 2016). Prior experiences can affect current interactions and the interpretation of those interactions (Waddington, Williams, Wright, & Newburn, 2015).

Many urban residents view some LEOs' demeanor as unnecessarily rough (Gau & Brunson, 2015). Police interactions often occur in neighborhoods with higher crime rates and social disorganization (Gau & Brunson, 2015). The demeanor and actions of LEOs have a significant impact on perceptions (Philpott, 2016). If LEOs have to give out citations, the recipients can still have positive perceptions of the LEOs as long as they treat the individuals justly and respectfully (National Institute of Justice, 2014b; Philpott, 2016). However, people are more likely to be satisfied with the police if they do not have any contact at all with them (Corsaro et al., 2015).

Miller and D'Souza (2016) found that police-initiated contact had adverse effects on perceptions, positive interactions had little to no effect, and negative interactions were significantly more influential in negatively affecting perceptions. Even though interactions had a significant impact on perceptions, Miller and D'Souza found that police visibility was more predictive in altering perceptions. The fairness and responsiveness variable was predictive for age and gender. Older and female participants had greater confidence in the police (Miller & D'Souza, 2016).

Race and Ethnicity

Researchers have found that adverse experiences can have a greater effect than positive experiences on negative public perceptions toward LEOs, especially for Latinos and Blacks in urban areas (Gau & Brunson, 2015; Maguire et al., 2016; Theodore & Habans, 2016). Wu (2014) asserted that Blacks, Asians, and Latinos were more likely than Whites to believe that LEOs hassled residents rather than help them, which increased their negative perceptions. Blacks have been reported as having less favorable views than Whites and Latinos about law enforcement (Nadal et al., 2017). Blacks also have had an increased fear of crime that has contributes to their negative views regarding police efficacy (Luo et al., 2017).

Hightower and Esmail (2015) assessed the perceptions of Blacks, Latinos, and LEOs toward law enforcement. Racial profiling was not a factor in these perceptions, but prior experience with LEOs was the most significant factor in influencing perceptions. Fifty percent of the citizen participants in Hightower and Esmail's study stated that prior experiences were a significant factor in their perceptions toward LEOs, whereas only 25% of the police participants believed that prior experiences were a significant factor. The police participants also knew that residents' previous experiences with law enforcement had a significant effect on perceptions. One citizen participant stated when he or she spoke with an officer, it was as if the officer cared about the participant's life (Hightower & Esmail, 2015). The participant compared the interaction to talking with a parent. One participant's statement was indicative of how significant the personal experiences are: "The way they treat me is the greatest influence. I don't automatically

assume all police are bad” (Hightower & Esmail, 2015, p. 40). Residents do not automatically have negative or positive perceptions about LEOs. Many residents will wait to judge LEOs until they determine how LEOs will approach situations and are going to treat the residents.

Girgenti-Malone, Khoder, Vega, and Castillo (2017) investigated college students’ perceptions about the police. Results indicated that non-White students were less likely to believe that the police use of force was justified, regardless of the suspect’s race or ethnicity (Girgenti-Malone et al., 2017). Carter, Corra, and Jenks (2016) conducted a similar study to examine the attitudes of Whites toward the use of force by the police. Carter et al. found that older, conservative men from the southern United States were more likely than individuals of other races, genders, and ages to support the use of force. Participants who held racial resentment were more likely than those who did not express racial resentment to support the use of force. However, over time, support for the use of force decreased (Carter et al., 2016). Even if LEOs have the right to use force, they must be aware of the situations and act in ways that do not exacerbate the situations.

Researchers have conceptualized scenarios where police force is necessary (Carter et al., 2016) as one way to determine the appropriateness of police responses. If a citizen was a murder suspect or was using obscene language, the participants in their study were less likely to support the use of force (Carter et al., 2016). Support increased if someone was trying to escape or was attacking a police officer. As education and income increased, so did the support for the use of force for someone escaping custody or attacking an officer (Carter et al., 2016). Support did not increase for murder suspects or

individuals using obscene language. The male participants tended to support the use of force, but the female participants were more likely to trust the police (Carter et al., 2016).

Burgason (2017) conducted a study in a southern U.S. county and found that the participants who were more likely to trust the police were White, older, and female. The participants in Burgason's study were more likely to worry less about violent crime and did not believe that racial profiling was a common occurrence. Burgason looked at neighborhood characteristics and found that communities with higher unemployment levels, more poverty, a higher Black population, and lower levels of education had less trust in the police. The results also showed that neighborhoods with a high percentage of civilians who received public assistance and a high percentage of disengaged youth had an increased probability of not trusting the police (Burgason, 2017). Although individual female participants had higher trust levels, female-headed households had decreased trust in the police (Burgason, 2017). Participants who were Black were significantly less likely to trust the police. Using effect size, Black participants decreased their odds of trusting the police by 57.8% (Burgason, 2017). However, as economic disadvantage increased, racial differences were minimized. Those who believed that racial profiling was widespread were less likely than those who did not believe that racial profiling was widespread to trust the police (Burgason, 2017).

In a study on how college students perceived police behavior, Johnson, Wilson, Maguire, and Lowrey-Kinberg (2017) showed a sample of college students videos about simulated traffic stops. The videos featured two different drivers (one White; one Black) with three conditions that were rated as positive, negative, or neutral. Students were

shown videos with one of the three conditions and either the White or the Black driver. Each video showed a general traffic stop: The officer approached the vehicle, spoke to the driver, obtained the driver's license and registration, and returned to his vehicle. The video then showed the officer returning to the driver's vehicle and issuing a citation for speeding.

The difference in the three videos was the officer's procedural justice, along with how the officer interacted with the driver (Johnson et al., 2017). The officer was polite and friendly in some videos, but he was rude and yelled at the driver in other videos. When the officer was friendly during a positive interaction, the participants viewed the officer positively. When the officer was rude and the participants thought that he was unfair, they perceived the officer negatively (Johnson et al., 2017). Participants who viewed the positive interaction had a greater sense of trust in the officer and were more willing to cooperate (Johnson et al., 2017).

Johnson et al. (2017) focused on race as a factor in the study. Johnson et al. found that the driver's race in the video did not affect perceptions. However, the participants' race affected some outcomes. The relationship between interaction type and willingness to cooperate with the police officer was more significant when the driver was White (Johnson et al., 2017). Participants who were Black had less favorable views than non-Black participants toward the officer. The positive effect of the officer's actions was greater when the driver was White (Johnson et al., 2017). Johnson et al. concluded that people are more likely to trust and obey officers if the officers treat residents in a procedurally just manner.

Immigration status. There is currently insufficient research on the ways that the number of years spent in the United States can affect perceptions toward law enforcement, but researchers have studied the perceptions toward LEOs based on immigration status. Results of a study in Australia indicated that Indigenous and immigrant residents had lower confidence in the police than non-Indigenous and Australian-born residents did (Zahnow et al., 2017). Some foreign-born residents who had become residents of the United States had more positive views than native-born residents of the police in regard to the police treating different groups properly (Wu, 2014). However, in the United States, undocumented Latino immigrants have expressed less favorable attitudes toward law enforcement than documented immigrants or non-immigrant Latinos have because of their fear deportation and the increased risk of mistreatment from LEOs (Theodore & Habans, 2016). Licona and Maldonado (2014) conducted a study in a rural town and found that numerous Latinos in the sample were afraid of law enforcement because of racial profiling and the threat of deportation. In addition, many Latino women who drove were afraid of being stopped by the police (Licona & Maldonado, 2014).

When presenting the results of their study, Becerra et al. (2017) noted that the Latinos in the study had a greater fear of deportation and had less confidence that the police would treat them fairly and not use excessive force. The Latino participants also had decreased confidence that the courts would treat them fairly and were less likely to report crimes. Older Latino participants had greater confidence that the police would not use excessive force, would treat Latinos fairly, and were more likely to report crimes

(Becerra et al., 2017). Participants who had lived longer in the United States and had more fear of deportation were less confident that the police would treat Latinos fairly (Becerra et al., 2017). Participants with a greater fear of deportation were less willing to report being the victims of crime. The female participants had less confidence that the police would treat Latinos fairly, but they were more likely to report being the victims of violent crimes (Becerra et al., 2017).

Even when immigrants trust the police in their communities and view LEOs positively, they may not call for help. Messing, Becerra, Ward-Lasher, and Androff (2015) explored Latinas' perceptions toward LEOs. Fear of deportation was a significant predictor in their perceptions. The more that the Latina participants in their study were afraid of deportation, the less willing they were to report being the victims of violent crimes (Messing et al., 2015). When the Latinas in the sample were more confident that LEOs would not use excessive force, they were less afraid about being deported and were 45% more likely to report that they had been the victims of violent crimes (Messing et al., 2015). In contrast, for each point increase in fear, the participants had 13% less confidence that LEOs and the courts would treat Hispanics in general fairly (Messing et al., 2015). Immigrant Latinas were less likely to report being the victims of crimes; however, older participants and those with higher levels of education were more likely to report victimization. Older participants also had more confidence that the courts would treat Hispanics in general fairly and LEOs would not use excessive force (Messing et al., 2015).

Sun and Wu (2015) studied the perceptions of Arab Americans toward the police in a Detroit, Michigan, metropolitan area. Sun and Wu found that the Arab Americans in their study had a significant amount of confidence in the police, as evidenced by higher trust levels, respect for authority, and confidence in the legal system. Interactions with LEOs were not a significant factor in the residents' confidence in the police, a result that was inconsistent with other findings (Corsaro et al., 2015; Miller & D'Souza, 2016; Philpott, 2016; Theodore & Habans, 2016).

In a study of the factors impacting public perceptions of LEOs, Theodore and Habans (2016) asserted that encounters served as one of the most significant factors contributing to perceptions toward LEOs. Participants who had a high school education or less were more likely to have positive perceptions toward the police. This result was contrary to previous research indicating that individuals with a higher level of education had more positive perceptions toward law enforcement (Afon & Badiora, 2016; McNeeley & Grothoff, 2016). Participants who were not born in the United States had positive perceptions toward the police, which was the same as for participants who were born in the country (Theodore & Habans, 2016).

Religious affiliation. Though there has been scant literature on the impact of religion on public perceptions toward LEOs, Sun and Wu (2015) found that religion (i.e., Muslim vs. Christian) did not affect perceptions toward the police. Approximately two-thirds of Arab Americans are Christians (Henderson, Ortiz, Sugie, & Miller, 2006), which has made it difficult to determine if religion has affected perceptions toward law enforcement. Sun and Wu argued that because the individuals had been highly

assimilated into U.S. society, immigrant status and religion did not have much influence over their perceptions toward LEOs. One limitation of Sun and Wu's study was that one of the cities in the Detroit metropolitan area, Dearborn, had an Arab American police chief and an Arab American fire chief. The Detroit area has strong social and political organizations that use collaborations between Arab Americans and law enforcement to develop a strong rapport with the Arab American community (Sun & Wu, 2015).

Place of birth. Similar to previous investigations focusing on religion, research on the impact of place of birth on perceptions toward LEOs has been limited, but some research has indicated that perceptions based on place of birth can influence these perceptions (Cao, Lai, & Zhao, 2012; Jang, Joo, & Zhao, 2010; T. R. Tyler, 2007). Many immigrants come to the United States from countries where they had negative experiences with the police (Menjivar & Bejarano, 2004; Piatkowska, 2015). Piatkowska (2015) examined data from different countries regarding homicide rates, discrimination, and government efficiency. Confidence in law enforcement was higher in countries with more government efficiency, higher concentrations of immigrants, higher levels of democracy, and lower homicide rates. Individuals in countries that had higher political discrimination had lower perceptions toward LEOs. Piatkowska also discovered that immigrants were more likely to have more negative perceptions toward LEOs than native-born residents. Immigrants' countries of origin can affect how the immigrants initially perceive the police, making it vital for police departments to have policies that can help to show immigrants that the police in the United States are not the same as the police in their home countries (Piatkowska, 2015).

Roles et al. (2016) investigated the views of individuals of Mexican descent living in the southeastern United States toward LEOs. Roles et al.'s results were different from what Piatkowska (2015) reported. Roles et al. found that immigrants of Mexican descent generally had favorable views toward LEOs. Immigrants who came to the United States legally were significantly more likely than immigrants who entered the country illegally to have favorable perceptions (Roles et al., 2016). More than 70% of the participants agreed that the police were honest and trustworthy, and almost 80% of the participants believed that the police would respond if they were called for help (Roles et al., 2016).

Even with such favorable views, only 65% of the participants agreed that the police in their communities treated them fairly (Roles et al., 2016). Significant misunderstandings by immigrants about law enforcement could have been the reason for these views. Most participants believed that they had to pay to file police reports (86%), prove that they were legal before obtaining police services (65%), and would be deported if they called the police (67%; Roles et al., 2016). This last result was surprising, particularly because 81.2% of the participants had been in the United States for at least 5 years (Roles et al., 2016). Roles et al. (2016) suggested that education programs be developed to help immigrants to understand police services and functions in the United States.

Urban Versus Rural

Approximately 19% of the U.S. population lives in rural areas (U.S. Census Bureau, 2018). Taylor et al. (2015) conducted a study in the northeastern United States to compare the perceptions of residents from rural and suburban areas toward the fairness

of LEOs. Even though the data from suburban and rural areas were combined, Taylor et al. discovered that most residents who did not live in the suburban area had favorable views toward law enforcement's fairness and effectiveness.

Ho and Cho (2016) found that less than 54% of residents in urban communities were satisfied with the police. Verga, Murillo, Toulon, Morote, and Perry (2016) reported that more college students in urban areas (30.25%) were dissatisfied with police than college students in suburban areas were (12.71%). Many rural regions in the United States have homogeneous populations; however, communities are becoming more diverse because many immigrants are settling in nonurban areas (Webster & Loayza, 2016). Ethnic minorities in rural areas have different experiences from those in urban areas (Jones, 2016), which may affect their perceptions toward LEOs.

Many residents in rural areas are low-income earners, with some regions being economically worse than others (Mammen et al., 2015). Rural areas have higher poverty rates than urban areas, with the majority of the poorest counties in the United States being rural (Donnermeyer, 2015). Sixteen percent of nonmetropolitan counties and 2% of metropolitan counties have high levels of poverty, but 95% of rural counties experience persistent poverty (Mammen et al., 2015). About 15.1% of the rural population and 12.5% of the urban population are considered poor (Mammen et al., 2015).

Many urban areas high in poverty also have high crime rates (FBI, 2015; Graif et al., 2014; Patel, 2014; USDA, 2016; Webster & Loayza, 2016) and negative perceptions toward LEOs (Corsaro et al., 2015). Many residents in low-income urban neighborhoods are ethnic minorities (Taylor et al., 2015; Wu, 2014). Most residents in rural areas are White

(Holmes et al., 2017), and Whites generally have more supportive perceptions than ethnic minorities do (Taylor et al., 2015; Wu, 2014). Even with the severe poverty in rural areas, the presumption is that the cohesiveness and fellowship of rural communities, when compared to urban areas, explain why the crime rates are low (Barclay, 2016; Donnermeyer, 2015). Some residents will keep their doors unlocked and the keys in their vehicles because they are not afraid that anything will be stolen (Weisheit, Falcone, & Wells, 2006).

Verga et al. (2016) conducted a study on the perspectives of students from urban and suburban areas toward LEOs. Verga et al. noted that the suburban students were more satisfied than urban students with the police. Verga et al. looked at race and reported that the White students were significantly more satisfied with the police than Black students were. Female participants also tended to have slightly lower levels of satisfaction than male participants did (Verga et al., 2016). One limitation of Verga et al.'s study was that the participants were criminal justice students who may already have had positive perceptions toward LEOs and were considering going into law enforcement themselves. Nevertheless, the results provided details about how and why the participants had positive perceptions toward the police.

As mentioned earlier, police crime statistics measure police presence, not necessarily the occurrence of crime (Donnermeyer, 2015). Urban and rural residents notify LEOs about crimes at similar rates of 73% and 74%, respectively (Kaylen & Pridemore, 2015). This means that one quarter of all crimes are not reported. Several explanations for residents in rural areas not reporting crimes have been posited. The

perpetrators and the victims may know each other; crimes were attempted, but not completed; the victims did not think that the offences were serious enough; or the crimes did not result in injury or financial loss (Green, 2016; Kaylen & Pridemore, 2015; Sidebottom, 2015). Crimes have included, but have not been limited to, substance abuse, theft, motor vehicle theft, violent offenses, breaking and entering, poaching, and an increase in drug trafficking in rural areas as an income source (Carleton, Brantingham, & Brantingham, 2014; Donnermeyer, 2015). The increase in drug use in rural areas could affect how residents perceive LEOs (Keyes, Cerda, Brady, Havens, & Galea, 2014). Knowing the types of crimes that are committed in rural areas and why they are not always reported could be beneficial in understanding rural residents' perceptions toward LEOs.

Two additional reasons for not reporting crimes have been identified by researchers: Some residents may not trust their local LEOs, or they do not believe that the police can help because of a lack of evidence (Green, 2016; Kaylen & Pridemore, 2015; Sidebottom, 2015). Crime in rural areas can be motivated by isolation and the unlikelihood of detection (Barclay, 2016). It is difficult for anyone to get caught committing crimes in rural areas because of the sparse population and the lack of sufficient surveillance cameras (Ceccato, 2016; Grote & Neubacher, 2016). Similar to residents in urban locations, adults are not the only people to commit crimes in rural areas. Adolescents who are bored because of the lack of activities also might turn to drugs or alcohol, or commit crimes (Willging et al., 2014).

Age

Children are exposed to violence by witnessing it firsthand or by watching it on different types of media. Police-involved shootings and the consequences can influence perceptions toward LEOs. Exposure to police violence can cause children emotional, cognitive, or social trauma (Dennis, 2015), contributing to their distrust of the police as they mature. Similar effects happen to adults' perceptions toward LEOs. Anything that adults may see, hear, or personally experience will affect their perceptions of LEOs. Older urban residents tend to have positive perceptions and are less likely to consider racial profiling a problem (Afon & Badiora, 2016; Wu, 2014).

Criminal offending peaks between the ages of 15 to 19 years and declines as individuals enter their early 20s (National Institute of Justice, 2014a). This contact with the police can influence perceptions toward police functioning, with youth generally perceiving the police less positively than adults do (Van Damme & Pauwels, 2016). Communities with older members have been found more satisfied with law enforcement (De Angelis & Wolf, 2016; McNeeley & Grothoff, 2016; Nix et al., 2015). Several social factors, including family members, peers, social media, or adolescents' experiences, can influence adolescents' perceptions toward LEOs (Dennis, 2015). Police officers often are the first professionals who children come into contact with when there is violence in their homes (Överlien & Aas, 2016). Children as young as 5 years of age have called the police in response to incidents of domestic violence (Radford & Hester, 2015). These types of interactions give LEOs the opportunity to make a positive or a negative impression on children.

The police have improved their handling of domestic violence issues (Överlien & Aas, 2016). Children who have been removed from homes where domestic violence has occurred have responded better toward the police as a result of the improved policies (Radford & Hester, 2015). One-third of the sexual assault victims whom the police encounter have been identified as adolescents (Greeson et al., 2014). When the police interact with victims in compassionate, caring, and personable ways, they can have a positive impact on victims' emotional well-being and the victims' views toward LEOs (Greeson et al., 2014). Children's experiences with LEOs will then affect how they perceive law enforcement in the future. Officers have expressed the belief that parental comments, whether true or false, can influence children's perceptions (Hightower & Esmail, 2015), an assertion consistent with the literature (Sindall et al., 2017).

Similar to adults, juveniles' experiences with LEOs can affect their perceptions toward law enforcement. Slocum, Wiley, and Esbensen (2016) surveyed a sample of juveniles to analyze the ways that direct contact influenced perceptions and delinquency. The outcomes of contact with the police had a significant effect on perceptions toward LEOs. Participants who had been arrested or stopped engaged in more delinquency than those who had no contact with law enforcement (Slocum et al., 2016). Youth who were stopped only (20%) were more satisfied than those who were arrested (12%; Slocum et al., 2016).

Youth with higher levels of satisfaction had lower delinquency levels than neutral or dissatisfied youth, but they also had a higher level of delinquency than those who had not been stopped or arrested (Slocum et al., 2016). Youth who had unsatisfactory or

neutral contact with police had a stronger belief in procedural injustice than youth who did not have any contact (Slocum et al., 2016). Contrary to this, satisfied youth had similar perceptions regarding procedural injustice as youth who had no contact with the police. Adolescents who had a stronger belief that procedural injustice occurred were more likely to commit delinquent acts (Slocum et al., 2016). College students who had stronger bonds and beliefs in law enforcement feel a stronger obligation to obey police commands (Ferdik, Gist, & Blasco, 2016). Those with stronger moral sentiments had higher trust in the police (Ferdik et al., 2016).

Gender

Given the relative dearth of research on the impact of gender on perceptions toward LEOs, the research has not been conclusive. Researchers who have assessed gender as a potential factor in public attitudes toward LEOs have not concentrated on gender and have featured delimitations such as including only ethnic minorities or individuals from particular socioeconomic strata. Dai and Jiang (2016) found no significant differences in gender perceptions in Cincinnati, OH, but they found that women in Queensland, Australia, were more likely to have positive views toward the police. Other researchers have found that female participants had more favorable perceptions than male participants regarding LEOs (Afon & Badiora, 2016; Ivkovic, 2008; Miller & D'Souza, 2016). When looking at police accountability, women have expressed more satisfaction than men with police services (De Angelis & Wolf, 2016).

Additional results have not identified any differences in gender perceptions toward LEOs (Lai & Zhao, 2010). Cochran and Warren (2012) studied participants who

had been stopped by the police within the past 12 months. Cochran and Warren found that gender made no difference in the perceived legitimacy of the stops. Cheng (2015) also found that gender had no significant relation to satisfaction with the police. Black men have been reported as having more negative perceptions than White or Asian men toward LEOs, but Nadal et al. (2017) did not find any differences between the genders.

Some results have identified differences between the genders, especially within certain contexts. Burgason (2017) and Carter et al. (2016) remarked that women were more likely than men to trust the police. Wu (2014) found that women were more likely than men to believe that racial profiling exists. Lytle and Randa (2015) observed that women's negative attitudes were related to fear. The women in Lytle and Randa's study who perceived increased physical disorder were more fearful and had more negative attitudes toward the police.

In a sample of college students, White and male participants were significantly more likely than non-Whites or female participants to perceive the police use of force as justified (Girgenti-Malone et al., 2017). Regardless of gender, the participants who had family members or close friends who were LEOs perceived the use of force as more justified than participants who did not (Girgenti-Malone et al., 2017). Parry (2017) also found that participants who had family members in law enforcement expressed improved beliefs regarding procedural justice. Even though gender perceptions have been inconclusive, some study participants have asserted that placing women in government and law enforcement jobs reduces corruption and improves perceptions (T. D. Barnes, Beaulieu, & Saxton, 2018).

Sexual Orientation

Research on the influence of sexual orientation on perceptions toward LEOs also has been limited. However, one study by Miles-Johnson (2013) focused on the ways that perceptions toward LEOs were different based on sexual identity. Participants in the study who identified as lesbian, gay, bisexual, transgender, or intersex (LGBTI) had more negative perceptions about procedural justice, treatment quality, trust, legitimacy, and respect from LEOs than heterosexual participants did (Miles-Johnson, 2013). These beliefs likely stemmed from adverse behaviors displayed against the LGBTI community, such as verbal or physical harassment, homophobic behavior, and unfair treatment. Male-to-male intimate partner violence occurred at rates similar to male-to-female violence (Miles-Johnson, 2013).

Statistics on crimes against the LGBTI community have helped to explain why LGBTI members perceive law enforcement in particular ways. For example, transgender victims of sexual assault have been more unlikely to report incidents to the police, largely because of their previous experiences with the police. Stotzer (2009) found that 70% of sexual assault victims did not report the assaults and that almost two-thirds (65%) of transgender residents were dissatisfied with their experiences with LEOs. LEOs accounted for several physical violence (17.5%), sexual violence (4.9%), and verbal abuse (37%) incidents toward transgender residents (Stotzer, 2009). Individuals who are transgender have experienced approximately 30% more intimate partner violence than cisgender members of the LGBTI community (Langenderfer-Magruder, Whitfield, Walls, Kattari, & Ramos, 2016). Even though transgender individuals have experienced more

intimate partner violence, they also have reported the violence less frequently than their cisgender counterparts have (Langenderfer-Magruder et al., 2016).

In a study of the perceptions of gay and bisexual men, Finneran and Stephenson (2013) surveyed a sample of gay and bisexual men to measure their perceptions of the ways that the police handled situations of intimate partner violence. Participants were asked how common and severe intimate partner violence was against gay and bisexual men than against heterosexual women. The participants were then asked if they thought that the police were more helpful in dealing with gay and bisexual or heterosexual intimate partner violence (Finneran & Stephenson, 2013). Eighty-five percent of the participants believed that the police would help women who were the victims of intimate partner violence; only 30% of the participants believed that the police would help gay or bisexual men who were the victims of intimate partner violence (Finneran & Stephenson, 2013). Almost 3 times as many gay or bisexual men believed that the police would not help them (Finneran & Stephenson, 2013). Around 39% of the participants indicated that contacting the police would be unhelpful to gay or bisexual men (Finneran & Stephenson, 2013). Participants who were older, White, and employed, and who had a level of higher education had more negative perceptions toward police responses (Finneran & Stephenson, 2013). These results contradicted other findings indicating that being older, White, and employed, and having a higher level of education correlated with more positive perceptions toward LEOs (Afon & Badiora, 2016; Dai & Jiang, 2016; Taylor et al., 2015; Wu, 2014).

Another study on sexual orientation (Briones-Robinson, Powers, & Socia, 2016) had results similar to those of Finneran and Stephenson (2013). Briones-Robinson et al. (2016) found that Whites and men were more prone to be the offenders in sexual orientation bias victimizations compared to other victimization forms and that Whites and men were more prone to become sexual orientation bias victims themselves. Many victims of violent sexual orientation bias have tended not to report these incidences to the police because of bias (Briones-Robinson et al., 2016). The severity of crimes and the value of stolen property increased the likelihood of the incidents being reported to the police (Briones-Robinson et al., 2016).

The location of victimizations also influenced the crime reporting rates (Briones-Robinson et al., 2016). Crimes in private locations were more likely than crimes in public locations to be reported. Incidents of sexual violence had 3.9 times greater odds of perceiving the police as biased, whereas other bias-motivated offenses had 4.2 times greater odds (Briones-Robinson et al., 2016).

Serpe and Nadal (2017) found that the transgender participants in their study had significantly diminished perceptions toward police than the heterosexual participants did. Although Serpe and Nadal reported no differences between gender and races, they did note a significant difference in perceptions between heterosexual Black and White female participants in their study. Transgender participants also were less comfortable interacting with law enforcement, even if they had initiated the contact with the police (Serpe & Nadal, 2017). The negative perceptions toward the police may have contributed to the transgender participants' reluctance to approach LEOs.

Law enforcement agencies develop policies to help LEOs to understand how to approach situations involving members of the LGBTI community (Israel et al., 2017). Approximately 120 LEOs participated in a workshop about LGBTI issues (Israel et al., 2017). Many participants made it clear that LEOs acted professionally and residents were getting the services that they needed. The participants argued that LEOs were fair and equal, and that LGBTI members were the ones who needed to change and trust law enforcement. Some officers stated that all LEOs treated everyone the same and would treat hostile transgender persons the same way that they would treat any other hostile individuals. Several officers were worried how attending the training would look to outsiders. They were worried that the training would suggest that the LEOs were doing something wrong that warranted the training. Other participants were concerned about the ways that the media would portray the training (Israel et al., 2017).

In the Israel et al. (2017) study, one officer stated that some LGBTI individuals had accused LEOs of discrimination in order to get out of trouble. Participants believed that members of the LGBTI community misunderstood the police and that each side could benefit from being educated about the other side. Officers did not always know whether or not to intervene when people were using derogatory speech toward the LGBTI community because they did not want to be accused of restricting free speech. Participants displayed an understanding of prejudice and oppression against the LGBTI community. Officers agreed that the ways that the LGBTI community perceive law enforcement are important, and they offered suggestions to improve this relationship with the LGBTI community (Israel et al., 2017).

Occupation and Education

Research on the ways that people with specific occupations perceive the police has been similarly limited, but the extant research has indicated that occupation does not affect perceptions toward LEOs (Smith & Hawkins, 1973). However, someone could argue that occupation does have an effect on perceptions. Certain occupations have higher salaries than others, and residents from more wealthy households are more prone to view law enforcement positively (Wu, 2014). In general, people with higher incomes are more satisfied with the police (Afon & Badiora, 2016).

Education is another potential influence on how individuals view the police, although studying education as a factor raises a number of potential subfactors. For example, people with an academic background in sociology may have very different opinions about the police than individuals who have studied business. People with a college education are more likely than those without that level of education to have positive views about the police (Dai & Jiang, 2016). However, people with college degrees and those who are employed also are more likely to believe that racial profiling exists (Wu, 2014). Education is not always linked to positive perceptions toward LEOs. The participants in a study in Houston, Texas, who had more education perceived the police less favorably (Luo et al., 2017). The results of these aforementioned studies on education have suggested that insufficient information preclude the drawing of any strong conclusions.

Summary

Recent events such as those in Ferguson, Missouri (Chaney & Davis, 2015); Charlotte, North Carolina (Larimer, 2016); and Baltimore, Maryland (Wen et al., 2015) have thrust law enforcement into the national news. These events have precipitated conversations about police legitimacy and racism. Law enforcement departments have sought methods to improve their relations with the communities whom they serve (Custers & Vergouw, 2015), but negative perceptions toward LEOs remain.

Efficacy and image can affect perceptions. These factors are significant because residents who do not believe that LEOs are performing their duties fairly and effectively perceive law enforcement negatively (Nadal & Davidoff, 2015). The manner in which LEOs treat residents from different races and ethnicities also contributes to residents' perceptions (Hightower & Esmail, 2015). Worse treatment means more negative perceptions of LEOs (Hightower & Esmail, 2015). Immigrants can have either positive or negative perceptions toward LEOs. Many immigrants are afraid of being deported and see LEOs as individuals who have the authority to arrest them (Licona & Maldonado, 2014; Messing et al., 2015; Theodore & Habans, 2016).

Immigrants may be more likely to perceive LEOs positively if a positive rapport has been established between the two groups (Sun & Wu, 2015). Immigrants' perceptions toward LEOs can be influenced by the perceptions that they had toward law enforcement in their countries of origin (Piatkowska, 2015). The effect of gender on perceptions toward LEOs has been inconclusive (Cheng, 2015; Dai & Jiang, 2016), but research has shown that as people age, their perceptions toward LEOs tend to become more positive

(Afon & Badiora, 2016; Van Damme & Pauwels, 2016; Wu, 2014). Older residents also are more likely to be satisfied with police services (De Angelis & Wolf, 2016). LGBTI community members have tended to perceive LEOs negatively (Miles-Johnson, 2013), but research on this cohort has been limited. Research on the impact of occupation on perceptions also has been limited, but individuals with higher incomes have been found to have positive perceptions toward LEOs (Afon & Badiora, 2016). Individuals with higher levels of education generally perceive law enforcement positively (Dai & Jiang, 2016).

High crime rates have been found in many urban areas high in poverty (Graif et al., 2014; Patel, 2014; USDA, 2016; Webster & Loayza, 2016), and the residents have perceived law enforcement negatively (Corsaro et al., 2015). Many rural areas also have been identified as having high levels of poverty (Donnermeyer, 2015; Mammen et al., 2015), but they have not had the high crime rates of urban areas (FBI, 2015). The FBI (2015) has studied populations and crime statistics in rural areas (FBI, 2015). The literature has provided information explaining why residents in urban areas perceive law enforcement in the ways that they do, but the perceptions of citizens in rural areas toward LEOs have not been studied in any depth.

This literature review about different variables and their relationships to perceptions toward LEOs, as well as the gap in the literature regarding perceptions of residents in rural areas toward LEOs, was presented in Chapter 2. Research about the variables was included to provide a comprehensive background into the variables and perceptions. The methods used to recruit participants, collect the data, and analyze the data are explained in Chapter 3. Chapter 3 contains details about the

methodological design of this quantitative study and the instrument used to measure the variables and covariates correlated to perceptions toward LEOs. The ethical procedures that the researcher followed also are presented in Chapter 3.

Chapter 3: Research Method

The purpose of this quantitative study was to examine the relationship between the DV of rural citizens' perceptions toward LEOs and the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status. Many rural regions have homogeneous populations; however, nonurban communities are becoming more diverse as immigrants settle in them (Webster & Loayza, 2016). Ethnic minorities in rural areas have different experiences than those in urban areas (Jones, 2016) that may affect their perceptions toward LEOs. I used the POPS (Nadal & Davidoff, 2015) to collect the data.

In Chapter 2, I discussed the ways that the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status correlated with rural residents' perceptions toward LEOs. In Chapter 3, I explain the methodology used to collect and analyze the data obtained from the POPS (see Nadal & Davidoff, 2015). Also included in the chapter are details about the research design, target population, sampling procedures, POPS, threats to validity, and ethical procedures.

Research Design and Rationale

Using a correlational design, I conducted this quantitative study to examine the relationship between the DV of rural citizens' perceptions toward LEOs and the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status. A correlational design was

appropriate for the study because no participants were assigned to specific groups and no variables were manipulated (see Creswell, 2014). The objective was to look for relationships, even if the relationships were associative rather than causal.

For the purposes of this study, perceptions referred to any positive or negative feelings, beliefs, ideas, impressions, or judgments of the participants that could have been shaped by learning, memory, expectation, or attention. Continuous predictors were age and immigration status. Discrete predictors were ethnicity, gender, religion, marital status, sexual orientation, income, employment status, and the highest education level completed. Time and resource constraints included the time needed to contact and obtain enough participants to ensure a representative sample. Data were collected using an online survey, so monetary constraints were limited. Researchers who have used surveys to measure perceptions toward law enforcement have concluded that residents in urban areas generally expressed negative perceptions toward law enforcement, depending on age, gender, or race (Cochran & Warren, 2012; Graif et al., 2014; Grimmelikhuijsen & Meijer, 2015; McNeeley & Grothoff, 2016; Nix et al., 2015).

Methodology

Population

Data were collected from residents living in rural areas of southeastern Colorado, defined as 39°N longitude to the southern Colorado state border and 104°W latitude to the eastern Colorado state border. These coordinates included all or a portion of the following counties: Baca, Bent, Cheyenne, Crowley, Kiowa, Las Animas, Lincoln, Otero, and Prowers. Residents were defined as individuals 18 years of age and older who were living

within the coordinates at the time of the study. After accounting for the coordinates and age range, the estimated target population was 39,315 residents. Population data were collected from the U.S. Census Bureau (2018).

Sampling and Sampling Procedures

Convenience sampling allowed me to obtain a sufficient number of participants based on time and financial restraints. The residents were chosen at random to complete the questionnaire. If probability sampling had been used, participants would have been chosen randomly from a list of all residents in southeastern Colorado. Anyone under the age of 18 years and living outside of southeastern Colorado was excluded from the study. Southeastern Colorado residents who were 18 years of age or older and from any age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status were eligible to join the study. Demographic information was obtained using a questionnaire that was part of the POPS.

Sample size was calculated using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009). Statistical power was set at .80, and alpha was set at .05. The statistical test was set at multiple linear regression with a priori used as the type of power analysis. With 10 predictors, two tails, and Cohen's f^2 small effect size of .02, the sample should have comprised 395 participants. Using the same parameters, but with a medium effect size (.15), the sample should have been 55 participants. A large effect size (.35) would have required a sample of 26 participants.

Recruitment, Participation, and Data Collection

I obtained the contact information of superintendents from school districts around southeastern Colorado so that they could distribute the POPS to all of their employees. Word of mouth and telephone calls were used to obtain more participants. Business cards with my e-mail address and the web address of the POPS (Nadal & Davidoff, 2015) were distributed in case potential participants had any questions. This approach also facilitated obtaining a more diverse sample. Demographic information included age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status. Participants had to sign the consent form electronically before completing the survey. Participants did not receive any form of compensation for completing the POPS.

The POPS (Nadal & Davidoff, 2015), an Internet-based survey, was chosen for its scope of reach, low cost, effectiveness, convenience, and confidential nature. Nadal and Davidoff gave me permission to use the POPS (see Appendix C). I selected SurveyMonkey to administer the survey and collect the data anonymously. Participants answered the 12 statements on the POPS using a Likert scale of responses ranging from 1 (I strongly agree) to 5 (I strongly disagree). For data analysis, the Likert scale was scaled as -2 to +2. “I strongly agree” was rated as +2, “indifferent” was rated as 0, and “I strongly disagree” was rated as -2.

Instrumentation and Operationalization of Constructs

Many researchers have focused on investigating one or two aspects that may contribute to perceptions toward LEOs. Nadal and Davidoff published the POPS in 2015

to obtain a wider assessment of the factors affecting residents' perceptions of LEOs. Nadal and Davidoff also wanted to develop an instrument that was broad and could be administered quickly to large, diverse groups. Nadal and Davidoff used a sample of undergraduate students from a large university to measure their attitudes toward LEOs. The participant pool was divided into two subsamples to conduct an exploratory and confirmatory principal components analysis. In the exploratory study, Nadal and Davidoff found high internal consistency with an overall Cronbach's alpha of .92. Cronbach's alpha often is used to determine internal consistency as well as show how an increase in the number of items in a scale and the correlations among items can represent the estimated reliability (Frost, Reeve, Liepa, Stauffer, & Hays, 2007).

Nadal and Davidoff (2015) tested for construct validity using the Racial and Ethnic Microaggressions Scale. Participants were asked what they thought the survey was trying to discover. All but one participant reported that the survey was about perceptions toward the police. Both scales combined resulted in high internal consistency with a Cronbach's alpha of .94. The results of Nadal and Davidoff's study showed that the POPS is a highly reliable and valid scale.

In the current study, participants' Likert responses to the POPS (Nadal & Davidoff, 2015) statements were recorded. Examples of statements were "Police treat people fairly," "Police do not discriminate," and "Police are friendly." LEOs referred to any members of organizations who had the authority to enforce laws by deterring, rehabilitating, or punishing people who broke the law. Officers were personnel from local police departments, sheriff's departments, state patrols, and any other state or federal law

enforcement entities (Bureau of Justice Statistics, 2017). The demographic IVs were measured using a questionnaire.

Data Analysis Plan

Ten RQs and their hypotheses guided this study:

RQ1: What is the relationship between age and rural residents' perceptions toward LEOs?

H_{01} : There is no significant relationship between age and rural residents' perceptions toward LEOs.

H_{a1} : There is a significant relationship between age and rural residents' perceptions toward LEOs.

RQ2: What is the relationship between gender and rural residents' perceptions toward LEOs?

H_{02} : There is no significant relationship between gender and rural residents' perceptions toward LEOs.

H_{a2} : There is a significant relationship between gender and rural residents' perceptions toward LEOs.

RQ3: What is the relationship between ethnicity and rural residents' perceptions toward LEOs?

H_{03} : There is no significant relationship between ethnicity and rural residents' perceptions toward LEOs.

H_{a3} : There is a significant relationship between ethnicity and rural residents' perceptions toward LEOs.

RQ4: What is the relationship between religion and rural residents' perceptions toward LEOs?

H_{04} : There is no significant relationship between religion and rural residents' perceptions toward LEOs.

H_{04} : There is a significant relationship between religion and rural residents' perceptions toward LEOs.

RQ5: What is the relationship between marital status and rural residents' perceptions LEOs?

H_{05} : There is no significant relationship between marital status and rural residents' perceptions toward LEOs.

H_{a5} : There is a significant relationship between marital status and rural residents' perceptions toward law enforcement officers.

RQ6: What is the relationship between sexual orientation and rural residents' perceptions toward LEOs?

H_{06} : There is no significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

H_{a6} : There is a significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

RQ7: What is the relationship between income and rural residents' perceptions toward LEOs?

H_{07} : There is no significant relationship between income and rural residents' perceptions toward LEOs.

H_{a7} : There is a significant relationship between income and rural residents' perceptions toward LEOs.

RQ8: What is the relationship between employment status and rural residents' perceptions toward LEOs?

H_{08} : There is no significant relationship between employment status and rural residents' perceptions toward LEOs.

H_{a8} : There is a significant relationship between employment status and rural residents' perceptions toward LEOs.

RQ9: What is the relationship between educational attainment and rural residents' perceptions toward LEOs?

H_{09} : There is no significant relationship between educational attainment and rural residents' perceptions toward LEOs.

H_{a9} : There is a significant relationship between educational attainment and rural residents' perceptions toward LEOs.

RQ10: What is the relationship between immigration status and rural residents' perceptions toward LEOs?

H_{010} : There is no significant relationship between immigration status and rural residents' perceptions toward LEOs.

H_{a10} : There is a significant relationship between immigration status and rural residents' perceptions toward LEOs.

SPSS was used to run the statistical analyses. Multiple linear regressions were conducted to investigate the relationship between the IVs of age, gender, ethnicity,

religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs. Multiple linear regressions are appropriate when assessing the strength of the relationship between a group of predictor variables on a continuous criterion variable (Tabachnick & Fidell, 2013). Cronbach's alpha was used to measure the reliability (Field, 2013) of the POPS (Nadal & Davidoff, 2015).

Threats to Validity

The design of the study was intended to minimize threats to internal and external validity. Sampling bias could have been a threat to external validity if an inadequate number of participants from minorities had participated in the study. Because a significant Latino population resides in southeastern Colorado (U.S. Census Bureau, 2018), the sample had to represent this population cohort. The threat to external validity could have occurred if the Latino participants had not responded or had responded untruthfully because they feared being deported (Licona & Maldonado, 2014; Theodore & Habans, 2016).

The POPS (Nadal & Davidoff, 2015) was chosen to lower the threat to external validity because the results could be generalizable to a larger population and assess the relationship between the IVs and the DV. Definitions were not too broad or narrow to bolster construct validity (Trochim, Donnelly, & Arora, 2016). Statistical power was set at .80 to improve conclusion validity. Another threat to external validity could have been the application of inaccurate conclusions to urban or other rural populations with different racial compositions. For example, southeastern Colorado has a high White and

Latino population (U.S. Census Bureau, 2018), whereas other rural areas of the United States may have different minorities that comprise a significant portion of the population. This study may be applicable to other rural areas in the United States with similar ethnic populations.

Previous research has shown how IVs can affect DVs (Nadal & Davidoff, 2015; Nix et al., 2015; Taylor et al., 2015). Longitudinal studies can be affected by perceptions that develop and change because of the participants' experiences or when the participants mature (Creswell, 2014). In the current study, the participants' maturation and mortality were not threats because only one survey that required no more than 30 minutes was administered through SurveyMonkey. The confidential nature of the online survey may have helped the participants to be more honest and forthcoming in their responses. Sometimes, participants will respond based on what they believe the researchers expect or want (Van de Mortel, 2008). Casler, Bickel, and Hackett (2013) concluded that online surveys could be valid and even superior to in-person surveys.

Ethical Procedures

I designed the ethical procedures to protect the integrity of the study and the privacy of the participants. Data collected for this study were protected and used according to methods approved by Walden University's Institutional Review Board (IRB approval #01-23-19-0413029). Before completing the POPS, participants had to sign the informed consent, which included information about the purpose of the study and that participation was voluntary. Participants also were informed that they could withdraw from the study at any time and without any negative consequences. All responses were

confidential, and participants' identities remained anonymous, thus ensuring that they had no fear of being deported (Licona & Maldonado, 2014; Theodore & Habans, 2016).

Completing the POPS did not cause any physical or psychological harm to the participants or affect their careers or personal lives in any aspect.

If any participants withdrew from the survey, their responses were not used in the data analysis. This study was not funded or supported by any external entities, so there were no incentives, financial or otherwise, to produce certain results. Only the university faculty and I have access to the data, which will be secured and kept for 5 years following completion of the study. Once those 5 years have passed, all data and information relevant to the study will be destroyed.

Summary

In this chapter, I discussed the research methodology used to examine the relationships of the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status to the DV of rural residents' perceptions toward LEOs. I explained the appropriateness of the correlational design and the use of multiple linear regression to analyze the data. The participants were residents of southeastern Colorado.

I discussed the POPS (Nadal & Davidoff, 2015), along with its relationship to the variables. Threats to validity and ethical concerns were addressed and applied during the study. Data were collected and stored securely according to Walden University's IRB requirements. The sample, target population, sample size, and recruitment process were

discussed in an effort to give future researchers an opportunity to replicate the study.

Strategies for validity and ethical procedures were discussed in this chapter.

Researchers have asserted that depending on a number of mediating factors, urban populations tend to view LEOs negatively (Cochran & Warren, 2012; Graif et al., 2014; Grimmelikhuijsen & Meijer, 2015; McNeeley & Grothoff, 2016; Nix et al., 2015).

Chapter 4 contains the results indicating how the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status were related to the DV of rural residents' perceptions toward LEOs.

Also included in Chapter 4 is information about the analysis of the data, acceptance or rejection of the null hypotheses, and the application of the statistical tests.

Chapter 4: Results

The purpose of this quantitative study was to use a correlational design to examine the relationships between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs. A demographic questionnaire and the Perceptions of Police Scale (POPS) were distributed to address the 10 RQs and their hypotheses:

RQ1: What is the relationship between age and rural residents' perceptions toward LEOs?

H_{01} : There is no significant relationship between age and rural residents' perceptions toward LEOs.

H_{a1} : There is a significant relationship between age and rural residents' perceptions toward LEOs.

RQ2: What is the relationship between gender and rural residents' perceptions toward LEOs?

H_{02} : There is no significant relationship between gender and rural residents' perceptions toward LEOs.

H_{a2} : There is a significant relationship between gender and rural residents' perceptions toward LEOs.

RQ3: What is the relationship between ethnicity and rural residents' perceptions toward LEOs?

H_{03} : There is no significant relationship between ethnicity and rural residents' perceptions toward LEOs.

H_{a3} : There is a significant relationship between ethnicity and rural residents' perceptions toward LEOs.

RQ4: What is the relationship between religion and rural residents' perceptions toward LEOs?

H_{04} : There is no significant relationship between religion and rural residents' perceptions toward LEOs.

H_{04} : There is a significant relationship between religion and rural residents' perceptions toward LEOs.

RQ5: What is the relationship between marital status and rural residents' perceptions LEOs?

H_{05} : There is no significant relationship between marital status and rural residents' perceptions toward LEOs.

H_{a5} : There is a significant relationship between marital status and rural residents' perceptions toward law enforcement officers.

RQ6: What is the relationship between sexual orientation and rural residents' perceptions toward LEOs?

H_{a6} : There is a significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

RQ7: What is the relationship between income and rural residents' perceptions toward LEOs?

H_{07} : There is no significant relationship between income and rural residents' perceptions toward LEOs.

H_{a7} : There is a significant relationship between income and rural residents' perceptions toward LEOs.

RQ8: What is the relationship between employment status and rural residents' perceptions toward LEOs?

H_{08} : There is no significant relationship between employment status and rural residents' perceptions toward LEOs.

H_{a8} : There is a significant relationship between employment status and rural residents' perceptions toward LEOs.

RQ9: What is the relationship between educational attainment and rural residents' perceptions toward LEOs?

H_{09} : There is no significant relationship between educational attainment and rural residents' perceptions toward LEOs.

H_{a9} : There is a significant relationship between educational attainment and rural residents' perceptions toward LEOs.

RQ10: What is the relationship between immigration status and rural residents' perceptions toward LEOs?

H_{010} : There is no significant relationship between immigration status and rural residents' perceptions toward LEOs.

H_{a10} : There is a significant relationship between immigration status and rural residents' perceptions toward LEOs.

This chapter provides information about the research findings, including information about the data collection and analysis procedures, along with presentation of the results. The chapter concludes with a summary of the findings.

Data Collection

Data were collected for 18 days from participants scattered throughout southeastern Colorado. Participants were recruited by e-mail and word of mouth. Data collection took longer than expected because of the low participation rate. Many potential participants were asked to join the study, but a large number did not complete the survey. I did not call anyone with a request to complete the survey because of the difficulty trying to recruit participants in person. Participants also completed a demographic survey before completing the POPS. The participants' responses to the POPS statements were recorded using a 5-point Likert scale.

Demographic Characteristics

The participants were 282 rural residents from southeastern Colorado. Approximately 70% of the participants ($n = 197$) were women, and 30% ($n = 83$) were men. The gender composition of the sample was different from state figures, which indicated that female individuals composed 49.7% of the population. The participants ranged in age from 18 years to 60+ years, with 7.8% between 18 and 22 years, 15.6% between 21 and 29 years, 17% between 30 and 39 years, 23.4% between 40 and 49 years, 18.8% between 50 and 59 years, and 17% older than 60 years. This breakdown in ages was representative of the state population, with only 13.8% of the entire population over the age of 65 years (U.S. Census Bureau, 2018).

The sample was distinct in many ways from samples used in previous studies of perceptions of law enforcement officers. The primary difference was that the sample comprised rural residents from southeastern Colorado, where not a single town contains more than 8,000 residents and only three towns have more than 2,500 residents. According to the U.S. Census Bureau (2018), the area has a sizeable number of Whites and Latinos, but few Blacks. Whites in Colorado comprise 87.3% of the entire population of the state, whereas Latinos comprise 21.5% and Blacks comprise 4.5% (U.S. Census Bureau, 2018). The composition of the sample was close to state figures, with 84% White participants, 11.7% Latino participants, and 1.1% Black participants.

The religious affiliation of about 64% of the inhabitants of Colorado is Christianity (Newport, 2016). When broken down, 44% of individuals in the state are Protestants, 16% are Roman Catholics, 3% are Mormons, and 1% are Eastern Orthodox (Newport, 2016). The participants in the sample were a fair representation of the population's religious composition: 63% Christianity, 45.4% Protestants, 16.3% Roman Catholics, and 1.4% Mormons. About 20% of the sample did not have any religious preference, and only 0.7% self-reported as Atheists. Table 1 includes information about the age, gender, marital status, ethnicity, and religion characteristics of the participants.

Table 1

Demographics for Age, Gender, Marital Status, Ethnicity, and Religion

	Characteristics	Frequency (<i>n</i>)	%
Age	18-20	22	7.8
	21-29	44	15.6
	30-39	48	17.0
	40-49	66	23.4
	50-59	53	18.8
	60+	48	17.0
Gender	Male	83	29.4
	Female	197	69.9
Marital status	Single	67	23.8
	Married	188	66.7
	Widowed	8	2.8
	Divorced	16	5.7
	Separated	2	.7
	Other	1	.4
Ethnicity	White	237	84.0
	Black	3	1.1
	Latino	33	11.7
	American Indian or Native	3	1.1
	Multiple	2	.7
	Other	2	.7
	Did not respond	2	.7
Religion	Roman Catholic	46	16.3
	Protestant	128	45.4
	Mormon	4	1.4
	Atheist	2	.7
	Jehovah's Witness	2	.7
	Other	44	15.6
	No religious preference	56	19.9

The annual household incomes of the participants varied from below \$20,000 (6%) to \$100,000 or more (14.2%). According to the U.S. Census Bureau (2018), the median household income for Colorado between 2013 and 2017 was \$65,458, and the percentage of the population in poverty was estimated to be 10.3%. The sample was representative of the population, with about 12.1% earning between \$30,000 and \$39,999, 11.7% earning between \$40,000 and \$49,999, 7.8% earning between \$50,000 and \$59,000, 9.2% earning between \$60,000 and \$69,999, 14.2% earning between

\$70,000 and \$79,999, 6.4% earning between \$80,000 and \$89,999, and 5.3% earning between \$90,000 and \$99,999.

Although Colorado is one of the states with a high number of Latino residents, it has one of the highest educational achievement gaps between Whites and Latinos (Carnevale, Garcia, & Fasules, 2018). According to the report released by Georgetown University Center on Education and Workforce, about 64% of the White residents in Colorado, compared to 39% of the Black residents and 29% of the Latino residents, have completed a certificate of higher education, an associate's degree, a bachelor's degree, or higher (Carnevale et al., 2018). Only 3.5% of the sample in the current study had a level of education below a high school degree; 8.2% had a high school degree or the equivalent, 14.5% had some college but no degree, 3.5% had a vocational degree, 14.5% had an associate's degree, 28.7% had a bachelor's degree, 24.7% had a master's degree, and 0.7% had a doctoral degree (Carnevale et al., 2018). In sum, 96.3% of the sample had achieved at least a high school education. This proportion was a good representative of the state estimate, which stood at 91.1% between 2013 and 2017 (U.S. Census Bureau, 2018).

Most (76.2%) participants who completed the survey were employed in full-time jobs working 40 or more hours per week; 12.4% were employed in part-time jobs working less than 40 hours per week. Only 1.8% of participants were unemployed, and another 1.8% were unemployed but not looking for work. About 7% of the sample had retired, and 0.4% were disabled and unable to work. According to the Colorado Department of Labor and Employment (2019), the national unemployment rate in 2018

stood at 4.0%, but in Colorado, the statistics were slightly lower at 2.7%. Therefore, the total unemployment rate of the sample at 3.6% was representative of the population.

Table 2 summarizes the participants' income, employment status, and educational attainment demographics.

Table 2

Demographics for Income, Employment Status, and Educational Attainment

	Demographic characteristics	Frequency (<i>n</i>)	%
Employment	Employed in part-time jobs (< 40 hr/wk)	35	12.4
	Employed in full time jobs (≥ 40 hr/wk)	215	76.2
	Not employed, looking for work	5	1.8
	Not employed, not looking for work	5	1.8
	Retired	20	7.1
	Disabled, not able to work	1	.4
Educational attainment	Less than high school degree	10	3.5
	High school degree or equivalent (e.g., GED)	23	8.2
	Some college, but no degree	41	14.5
	Vocational degree	10	3.5
	Associate's degree	41	14.5
	Bachelor's degree	81	28.7
	Master's degree	70	24.8
	Doctoral degree	2	.7
Professional degree	4	1.4	
Income	Less than \$20,000	16	5.7
	\$20,000-\$29,999	16	5.7
	\$30,000-\$39,999	34	12.1
	\$40,000-\$49,999	33	11.7
	\$50,000-\$59,999	22	7.8
	\$60,000-\$69,999	26	9.2
	\$70,000-\$79,999	40	14.2
	\$80,000-\$89,999	18	6.4
	\$90,000-\$99,999	15	5.3
	\$100,000 or more	40	14.2
	Preferred not to respond	22	7.8

More than 97% of the participants were U.S. citizens; 1.4% were not. Among the minority groups in the sample, the major country of origin was Mexico, which accounted for 2.8% of the total sample. This percentage reflected the true composition of rural southeastern Colorado, where the population of immigrants of Mexican descent is

sizeable. This composition was important in allowing me to use the findings to examine how Latinos in rural areas, compared to those in urban areas, perceived LEOs.

With regard to the number of years that the participants had lived in the United States, most had been born in the United States, so the question was not applicable to their case. However, 1.1% of the participants had lived in the United States for 11 to 20 years, 1.8% between 21 and 30 years, and 1.4% for more than 30 years. Table 3 summarizes the immigration status of the participants.

Table 3

Immigration Status (Citizenship, Country of Origin, and No. of Years in USA)

	Demographic characteristics	Frequency	%
Citizenship	U.S. citizen	275	97.5
	Permanent resident	1	.4
	Not a U.S. citizen of the United States	4	1.4
Country of origin	United States	271	96.1
	Mexico	8	2.8
	Other	2	.7
Years in USA	11-20	3	1.1
	21-30	5	1.8
	> 30	4	1.4
	Not applicable	258	91.5
	Preferred not to respond	2	.7

Results

Descriptive Statistics

The purpose of the study was to examine the relationships between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs.

Residents' Perceptions Toward Law Enforcement Officers

The residents' perceptions toward LEOs were captured using the POPS (Nadal & Davidoff, 2015), which comprises 12 statements to measure attitudes toward LEOs. The participants were asked to rate the degree to which they agreed with the statements. Sample items included "Police officers are friendly," "I like the police," "Police officers treat all people fairly," and "Police officers care about my community." The items were written in a positive language, meaning that higher scores indicated more favorable perceptions toward LEOs (Nadal & Davidoff, 2015).

The responses were measured on a 5-point Likert-type scale ranging from 1 (I strongly agree) to 5 (I strongly disagree). The Cronbach's alpha for the 12 statements measuring attitudes toward LEOs was 0.95, indicating that the POPS was highly reliable. For data analysis, the responses were scaled between 0.00 and 5.00.

The descriptive analyses of the participants' perceptions toward LEOs for the 12 items on the POPS scale are listed in Table 4. The rural residents who participated in the study agreed that LEOs are friendly ($M = 3.86$, $SD = 0.70$), LEOs protect them ($M = 4.12$, $SD = 0.83$), they like the police ($M = 4.08$, $SD = 0.80$), LEOs are good people ($M = 3.90$, $SD = 0.75$), the police provide safety ($M = 4.11$, $SD = 0.78$), the police are helpful ($M = 4.11$, $SD = 0.72$), the police are trustworthy ($M = 3.73$, $SD = 0.84$), the police are reliable ($M = 3.78$, $SD = 0.83$), and LEOs care about their community ($M = 4.01$, $SD = 0.85$). However, the participants were indifferent as to whether the police officers treat all people fairly ($M = 3.21$, $SD = 1.02$), the police do not discriminate ($M = 3.14$, $SD = 0.97$), and police officers are unbiased ($M = 3.11$, $SD = 0.92$). Overall, the POPS score

indicated that the rural residents were more likely to agree that the police act in a proper manner ($M = 3.76$, $SD = 0.67$).

Table 4

Participants' Perceptions Toward LEOs

	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Police officers are friendly	282	3.86	0.70	1.00	5.00
Police officers protect me	282	4.12	0.83	1.00	5.00
Police officers treat all people fairly	281	3.21	1.02	1.00	5.00
I like the police	279	4.08	0.80	1.00	5.00
The police are good people	280	3.90	0.75	1.00	5.00
The police do not discriminate	281	3.14	0.97	1.00	5.00
The police provide safety	282	4.11	0.78	1.00	5.00
The police are helpful	282	4.11	0.72	1.00	5.00
The police are trustworthy	282	3.73	0.84	1.00	5.00
The police are reliable	280	3.78	0.83	1.00	5.00
Police officers are unbiased	280	3.11	0.92	1.00	5.00
Police officers care about my community	281	4.01	0.85	1.00	5.00
POPS score	282	3.76	0.67	1.17	5.00

Age and Perceptions of Police Behavior

Descriptive statistics were used to explore the perceptions of LEOs by every demographic factor. The results of age and the rural residents' perceptions toward LEOs' improper behavior are seen in Table 5. Results suggested that participants ages 18 to 20 years were the most likely to agree that the police act in a proper manner ($M = 3.95$, $SD = 0.65$), followed by participants age 60 years and above ($M = 3.91$, $SD = 0.65$), 50 to 59 years ($M = 3.78$, $SD = 0.71$), 40 to 49 years ($M = 3.70$, $SD = 0.70$), 20 to 29 years ($M = 3.70$, $SD = 0.76$), and 30 to 39 years ($M = 3.68$, $SD = 0.57$). The senior adults and adolescents in the sample were less likely than participants between the ages of 21 and 59 years to believe that the police act in an improper manner.

Table 5

Perceptions Toward LEOs Based on Age

Age	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
18-20	22	3.95	0.65	2.42	5.00
21-29	44	3.70	0.76	1.58	5.00
30-39	48	3.68	0.57	1.67	5.00
40-49	66	3.70	0.70	1.17	5.00
50-59	53	3.78	0.71	2.17	5.00
60+	48	3.91	0.65	1.17	5.00

Gender and Perceptions of Police Behavior

This analysis considered the rate of agreement by the male and female participants that the LEOs acted properly. According to the results in Table 6, male and female participants were likely to agree that LEOs acted in a proper manner. The mean POPS score for male participants was 3.81 ($SD = 0.73$) and 3.75 ($SD = 0.66$) for female participants. The male participants were more likely than the female participants to have favorable perceptions toward LEOs.

Table 6

Perceptions Toward LEOs Based on Gender

Gender	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Male	83	3.81	0.73	1.17	5.00
Female	197	3.75	0.66	1.17	5.00

Ethnicity and Perceptions of Police Behavior

Analysis of the IV of ethnicity to the DV of perceptions toward LEOs considered the agreement rates of the members of the various ethnic groups to the statements concerning LEOs' behavior. The descriptive analyses are in Table 7. According to the results, Blacks were the most likely to perceive LEOs as behaving improperly, with a mean POPS score of 3.00 ($SD = 0.25$). Blacks were followed by Latinos ($M = 3.57$,

$SD = 0.71$), Whites ($M = 3.80$, $SD = 0.68$), Multiple Ethnicity ($M = 3.96$, $SD = 0.65$), and American Indians ($M = 3.03$, $SD = 0.05$). Results indicated that persons of color tended to have unfavorable perceptions toward LEOs. Being Black was associated with negative perceptions toward LEOs.

Table 7

Perceptions Toward LEOs Based on Ethnicity

Ethnicity	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
White	237	3.80	0.68	1.17	5.00
Black	3	3.00	0.25	2.75	3.25
Latino	33	3.57	0.71	1.67	5.00
American Indian or Native	3	4.03	0.05	4.00	4.08
Multiple	2	3.96	0.65	3.50	4.42
Other	2	3.58	0.12	3.50	3.67

Religion and Perceptions of Police Behavior

Results for religion and LEOs' behavior are in Table 8. Results showed that residents who followed Christianity were the most likely to perceive LEOs as acting in a proper manner. Participants subscribing to the Mormon religion were the most likely to perceive LEOs as acting in a proper manner ($M = 3.42$, $SD = 0.64$), followed by Protestants ($M = 3.82$, $SD = 0.68$) and Roman Catholics ($M = 3.70$, $SD = 0.68$). Residents subscribing to Jehovah's Witness and Atheists were the least likely to perceive the LEOs as acting in a proper manner. The Atheists in the sample had a POPS mean score of 3.25 ($SD = 0.24$), and residents subscribing to the Jehovah's Witness religion had a mean POPS score of 3.38 ($SD = 0.88$).

Table 8

Perceptions Toward LEOs Based on Religion

Religion	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Roman Catholic	46	3.70	0.68	2.17	5.00
Protestant	128	3.82	0.68	1.17	5.00
Mormon	4	4.06	0.64	3.42	4.83
Atheist	2	3.25	0.24	3.08	3.42
Jehovah's Witness	2	3.38	0.88	3.38	0.88
Other	44	3.82	0.68	1.75	5.00
No religious preference	56	3.65	0.67	1.58	5.00

Marital Status and Perceptions of Police Behavior

The results for marital status and perceptions toward the behavior of LEOs are in Table 9. Participants who were single were the most likely to perceive LEOs as behaving improperly, with a mean POPS scores of 3.69 ($SD = 0.94$). Single participants were followed by participants who were married or in domestic partnerships ($M = 3.76$, $SD = 0.65$), widowed ($M = 3.86$, $SD = 0.51$), divorced ($M = 3.92$, $SD = 0.73$), or separated ($M = 4.33$, $SD = 0.94$). These results indicated a trend between marital status and perceptions toward LEOs' behavior. The experience of marriage had the effect of perceiving LEOs' behavior favorably.

Table 9

Perceptions Toward LEOs Based on Marital Status

Marital status	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Single (never married)	67	3.69	0.77	1.17	5.00
Married or domestic partnership	188	3.76	0.65	1.17	5.00
Widowed	8	3.86	0.51	3.17	4.67
Divorced	16	3.92	0.73	2.58	5.00
Separated	2	4.33	0.94	3.67	5.00
Other	1	4.00	-	4.00	4.00

Sexual Orientation and Perceptions of Police Behavior

The results of sexual orientation and perceptions of LEOs' behavior are in Table 10. Results showed that the bisexual participants were the most likely to have unfavorable perceptions toward LEOs' behavior, with POPS score means of 3.17 ($SD = 0.68$). The heterosexual participants were the most likely to have positive or favorable perceptions toward LEOs' behavior, with a mean POPS score of 3.76 ($SD = 0.68$). Sexual orientation did not have a predictive relationship on perceptions toward LEOs.

Table 10

Perceptions Toward LEOs Based on Sexual Orientation

Sexual orientation	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Heterosexual/Straight	275	3.76	0.68	1.17	5.00
Gay	1	3.75	-	3.75	3.75
Bisexual	2	3.17	0.47	2.83	3.50
Other	1	3.75	-	3.75	3.75
Prefer not to respond	3	4.19	0.49	3.83	4.75

Income and Perceptions of Police Behavior

The results in Table 11 represent the perceptions of the participants toward LEOs' proper or improper behavior. According to the results, participants earning less than \$20,000 annually were the most likely to have favorable perceptions toward LEOs' behavior, with a mean POPS score of 4.09 ($SD = 0.68$). Participants earning less than \$20,000 were followed by participants earning \$40,000 to \$49,999 ($M = 3.88$, $SD = 0.73$), \$60,000 to \$69,999 ($M = 3.81$, $SD = 0.73$), and \$30,000 to \$39,999 ($M = 3.80$, $SD = 0.49$). Participants with annual incomes of \$20,000 to \$29,999 were the least likely to have favorable perceptions of LEOs' behavior.

Table 11

Perceptions Toward LEOs Based on Income

Income	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Less than \$20,000	16	4.09	0.68	3.00	5.00
\$20,000 – \$29,999	16	3.36	0.73	1.75	1.33
\$30,000 – \$39,999	34	3.80	0.49	3.00	4.00
\$40,000 – \$49,999	33	3.88	0.73	1.58	5.00
\$50,000 – \$59,999	22	3.67	0.70	1.17	4.67
\$60,000 – \$69,999	26	3.81	0.73	1.67	5.00
\$70,000 – \$79,999	40	3.72	0.57	2.33	5.00
\$80,000 – \$89,999	18	3.60	0.99	1.17	4.92
\$90,000 – \$99,999	15	3.72	0.62	2.83	4.83
\$100,000 or more	40	3.75	0.53	2.17	4.83
Preferred not to respond	22	3.90	0.81	2.42	5.00

Employment Status and Perceptions of Police Behavior

The results in Table 12 represent the participants' perceptions of LEOs' behavior. Participants who were employed in part-time jobs and working less than 40 hours per week were the most likely to have favorable perceptions of LEOs' behavior, with a mean POPS score of 3.98 ($SD = 0.66$). These participants were followed by participants who were disabled and unable to work ($M = 3.83$), not employed and not looking for work ($M = 3.80$, $SD = 0.68$), employed in full-time jobs and working 40 or more hours per week ($M = 3.75$, $SD = 0.65$), retired ($M = 3.62$, $SD = 0.93$), and not employed, but looking for work ($M = 3.48$, $SD = 0.76$). Results indicated a trend between being unemployed, but not looking for work, and negative perceptions toward LEOs' behavior. Participants who were employed or unemployed, but not looking for work, were more likely to have favorable perceptions toward LEOs' behavior when compared to participants who were unemployed and looking for work.

Table 12

Perceptions Toward LEOs Based on Employment Status

Employment status	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Employed in part-time jobs (< 40 hr/wk)	35	3.98	0.66	2.50	5.00
Employed in full-time jobs (\geq 40 hr/wk)	215	3.75	0.65	1.17	5.00
Not employed, but looking for work	5	3.48	0.76	2.42	4.25
Not employed and not looking for work	5	3.80	0.68	3.17	4.82
Retired	20	3.62	0.93	1.17	5.00
Disabled, not able to work	1	3.83	-	3.83	3.83

Educational Attainment and Perceptions of Police Behavior

The results for educational attainment and perceptions toward LEOs' behavior are in Table 13. Participants with a doctoral degree were the most likely to have favorable perceptions of LEOs' behavior ($M = 4.75$, $SD = 0.12$). Participants with a doctoral degree were followed by participants with less than a high school degree ($M = 4.37$, $SD = 0.52$), those with a professional degree ($M = 4.08$, $SD = 0.82$), those with a vocational degree ($M = 3.89$, $SD = 0.52$), and those with some college, but no degree ($M = 3.84$, $SD = 0.65$). Results showed a strong relationship between higher education and favorable perceptions of LEOs' behavior. Participants with a bachelor's degree or higher were more likely than those with an associate's degree to have favorable perceptions toward LEOs' behavior. Participants with a vocational degree were more likely than those with some college, but no degree, and those with a high school degree such as the GED, to have favorable perceptions toward LEOs' behavior. However, there were exceptions to this trend in that participants with less than a high school degree were more likely than other participants, except those with a doctoral degree, to have favorable perceptions of LEOs' behavior.

Table 13

Perceptions Toward LEOs Based on Educational Attainment

Educational attainment	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Less than high school degree	10	4.37	0.52	3.42	5.00
High school degree or equivalent (e.g., GED)	23	3.73	0.88	1.58	5.00
Some college, but no degree	41	3.85	0.65	2.50	5.00
Vocational degree	10	3.89	0.52	3.17	5.00
Associate's degree	41	3.52	0.62	1.75	4.83
Bachelor's degree	81	3.69	0.67	1.17	5.00
Master's degree	70	3.80	0.64	1.17	4.92
Doctoral degree	2	4.75	0.12	4.67	4.83
Professional degree	4	4.08	0.82	3.08	4.83

Immigration Status and Perceptions of Police Behavior

The results for immigration status and perceptions of LEOs' behavior are in Table 14. Participants who were permanent residents of the United States were the most likely to have favorable perceptions of LEOs' behavior ($M = 5.00$). Permanent residents were followed by participants who were not U.S. citizens of the U.S. ($M = 5.81$, $SD = 0.75$) and then U.S. citizens ($M = 5.76$, $SD = 0.68$). Results indicated a trend between U.S. citizenship and negative perceptions of LEOs' behavior.

Table 14

Perceptions Toward LEOs Based on Immigration Status

Immigration status	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
U.S. citizen	275	3.76	0.68	1.17	5.00
Permanent resident	1	5.00	-	5.00	5.00
Not a U.S. citizen	4	3.81	0.75	3.00	4.82

Inferential Analysis

Multiple linear regressions were conducted to examine potential relationships between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV

of rural residents' perceptions of LEOs. A multiple linear regression is appropriate when assessing the strength of the relationship between a series of predictors and a continuous criterion variable (Tabachnick & Fidell, 2013). The IVs correspond to the demographic variables. The continuous criterion variable corresponds to perceptions of LEOs.

Statistical Assumptions

The core assumptions of the multiple linear regression are level of measurement for the DV, normality, homoscedasticity, and absence of multicollinearity. The POPS score was numerical and was calculated through an average of the participants' scores on the 12 POPS statements on perceptions toward LEOs, with possible scores ranging from 1.00 to 5.00. Therefore, the POPS score was a continuous measurement. The assumptions of normality and homoscedasticity were tested through an examination of the scatterplots. Normality was assessed with a P-P scatterplot. The assumption was met because the data closely followed the normality trend line (see Figure 1). Homoscedasticity was met because there was random spread in the scatterplot (see Figure 2). Absence of multicollinearity was assessed with variance inflation factors (VIFs). The assumption was met because each predictor variable had a VIF less than 10 (Stevens, 2009).

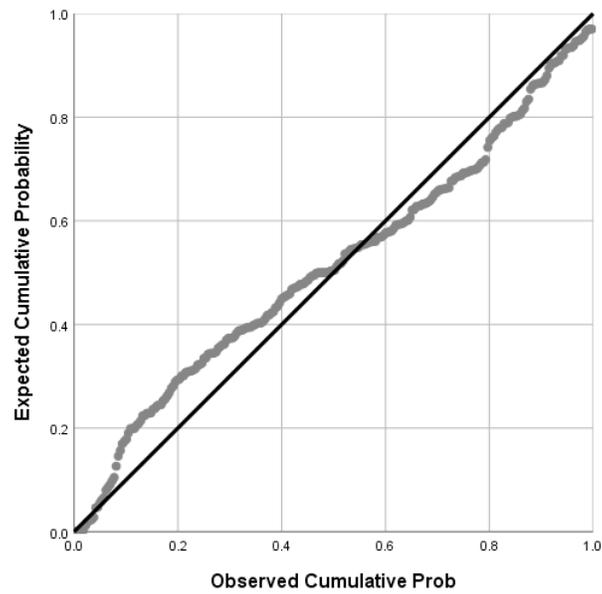


Figure 1. Normal P-P scatterplot for perceptions toward LEOs.

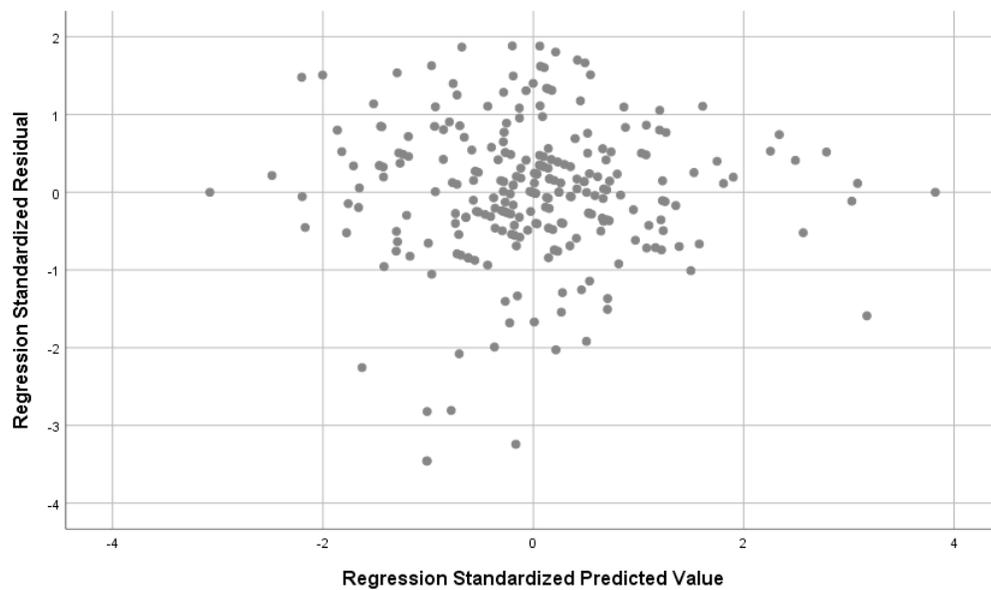


Figure 2. Residuals scatterplot for perceptions toward LEOs.

Hypothesis Testing

RQ1: What is the relationship between age and rural residents' perceptions toward LEOs?

H_{01} : There is no significant relationship between age and rural residents' perceptions toward LEOs.

H_{a1} : There is a significant relationship between age and rural residents' perceptions toward LEOs.

To address RQ1, a multiple linear regression was conducted to examine the relationship between age and rural residents' perceptions toward LEOs. For the regression, ages 18 to 20 years were treated as the reference group. Age did not have a significant contribution to perceptions toward LEOs, $F(5, 275) = 1.15, p = .336, R^2 = .020$ (see Table 15). Age accounted for approximately 2% of the variance in perceptions toward LEOs. Because of the non-significance of the F test, the individual age categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 1.

Table 15

Linear Regression With Age Predicting Perceptions Toward LEOs

Variable	B	SE	β	t	p	VIF
Age group (reference: 18-20)						
21-29	-0.25	0.18	-.13	-1.41	.160	2.53
30-39	-0.27	0.17	-.15	-1.53	.127	2.64
40-49	-0.25	0.17	-.16	-1.51	.134	3.06
50-59	-0.17	0.17	-.10	-0.97	.334	2.77
60+	-0.04	0.17	-.02	-0.20	.840	2.64

Note. $F(5, 275) = 1.15, p = .336, R^2 = .020$

RQ2: What is the relationship between gender and rural residents' perceptions toward LEOs?

H_{02} : There is no significant relationship between gender and rural residents' perceptions toward LEOs.

H_{a2} : There is a significant relationship between gender and rural residents' perceptions toward LEOs.

To address RQ2, a multiple linear regression was conducted to examine the relationship between gender and rural residents' perceptions toward LEOs. For the regression, male participants were treated as the reference group. Gender did not have a significant contribution to perceptions toward LEOs, $F(1, 278) = 0.40, p = .527, R^2 = .001$ (see Table 16). Gender accounted for approximately 0.1% of the variance in perceptions toward LEOs. There was no statistical evidence to reject Null Hypothesis 2.

Table 16

Linear Regression With Gender Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Gender (reference: male)	-0.06	0.09	-.04	-0.63	.527

Note. $F(1, 278) = 0.40, p = .527, R^2 = .001$

RQ3: What is the relationship between ethnicity and rural residents' perceptions toward LEOs?

H_{03} : There is no significant relationship between ethnicity and rural residents' perceptions toward LEOs.

H_{a3} : There is a significant relationship between ethnicity and rural residents' perceptions toward LEOs.

To address RQ3, a multiple linear regression was conducted to examine the relationship between ethnicity and rural residents' perceptions toward LEOs. For the regression, White was treated as the reference group. Ethnicity did not have a significant contribution to perceptions toward LEOs, $F(5, 274) = 1.61, p = .157, R^2 = .029$ (see Table 17). Ethnicity accounted for approximately 2.9% of the variance in perceptions toward LEOs. Because of the non-significance of the F test, the individual ethnicity categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 3.

Table 17

Linear Regression With Ethnicity Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	VIF
Ethnicity group (reference: White)						
Black	-0.80	0.39	-.12	-2.04	.042	1.00
Latino	-0.23	0.13	-.11	-1.85	.066	1.01
American Indian	0.23	0.39	-.04	0.58	.563	1.00
Multiple ethnicities	0.16	0.48	-.02	0.33	.742	1.00
Other	-0.22	0.48	-.03	-0.45	.651	1.00

Note. $F(5, 274) = 1.61, p = .157, R^2 = .029$

RQ4: What is the relationship between religion and rural residents' perceptions toward LEOs?

H_{04} : There is no significant relationship between religion and rural residents' perceptions toward LEOs.

H_{04} : There is a significant relationship between religion and rural residents' perceptions toward LEOs.

To address RQ4, a multiple linear regression was conducted to examine the relationship between religion and rural residents' perceptions toward LEOs. For the regression, Catholic was treated as the reference group. Religion did not have a

significant contribution to perceptions toward LEOs, $F(6, 275) = 0.98, p = .438, R^2 = .021$ (see Table 18). Religion accounted for approximately 2.1% of the variance in perceptions toward LEOs. Because of the non-significance of the F test, the individual religion categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 4.

Table 18

Linear Regression With Religion Predicting Perceptions Toward LEOs

Variable	B	SE	β	t	p	VIF
Religion (reference: Catholic)						
Protestant	0.12	0.12	.09	1.01	.314	2.07
Mormon	0.36	0.35	.06	1.02	.311	1.07
Atheist	-0.45	0.49	-.06	-0.93	.355	1.04
Jehovah's Witness	-0.33	0.49	-.04	-0.67	.503	1.04
Other	0.12	0.14	.06	0.84	.403	1.65
No religious preference	-0.06	0.14	-.03	-0.43	.670	1.78

Note. $F(6, 275) = 0.98, p = .438, R^2 = .021$

RQ5: What is the relationship between marital status and rural residents' perceptions LEOs?

H_{05} : There is no significant relationship between marital status and rural residents' perceptions toward LEOs.

H_{a5} : There is a significant relationship between marital status and rural residents' perceptions toward law enforcement officers.

To address RQ5, a multiple linear regression was conducted to examine the relationship between marital status and rural residents' perceptions toward LEOs. For the regression, single was treated as the reference group. Marital status did not have a significant contribution to perceptions toward LEOs, $F(5, 276) = 0.64, p = .667, R^2 = .012$ (see Table 19). Marital status accounted for approximately 1.2% of the variance in

perceptions toward LEOs. Because of the non-significance of the F test, the individual marital status categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 5.

Table 19

Linear Regression With Marital Status Predicting Perceptions Toward LEOs

Variable	B	SE	β	t	p	VIF
Marital status (reference: Single)						
Married	0.07	0.10	.05	0.72	.472	1.27
Widowed	0.16	0.25	.04	0.64	.520	1.09
Divorced	0.23	0.19	.08	1.19	.235	1.17
Separated	0.64	0.49	.08	1.31	.191	1.02
Other	0.31	0.69	.03	0.45	.656	1.01

Note. $F(5, 276) = 0.64, p = .667, R^2 = .012$

RQ6: What is the relationship between sexual orientation and rural residents' perceptions toward LEOs?

H_{06} : There is no significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

H_{a6} : There is a significant relationship between sexual orientation and rural residents' perceptions toward LEOs.

To address RQ6, a multiple linear regression was conducted to examine the relationship between sexual orientation and rural residents' perceptions toward LEOs. For the regression, heterosexual was treated as the reference group. Sexual orientation did not have a significant contribution to perceptions toward LEOs, $F(3, 275) = 0.51, p = .677, R^2 = .006$ (see Table 20). Sexual orientation accounted for approximately 0.6% of the variance in perceptions toward LEOs. Because of the non-significance of the F test,

the individual sexual orientation categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 6.

Table 20

Linear Regression With Sexual Orientation Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	VIF
Sexual orientation (reference: Heterosexual)						
Gay	-0.01	0.68	-.00	-0.02	.984	1.00
Bisexual	-0.60	0.48	-.07	-1.24	.218	1.00
Other	-0.01	0.68	-.00	-0.02	.984	1.00

Note. $F(3, 275) = 0.51, p = .677, R^2 = .006$

RQ7: What is the relationship between income and rural residents' perceptions toward LEOs?

H_{07} : There is no significant relationship between income and rural residents' perceptions toward LEOs.

H_{a7} : There is a significant relationship between income and rural residents' perceptions toward LEOs.

To address RQ7, a multiple linear regression was conducted to examine the relationship between income and rural residents' perceptions toward LEOs. For the regression, less than \$20,000 was treated as the reference group. Income did not have a significant contribution to perceptions toward LEOs, $F(9, 250) = 1.43, p = .174, R^2 = .049$ (see Table 21). Income accounted for approximately 4.9% of the variance in perceptions toward LEOs. Despite non-significance to the overall F test, it is worth noting that a couple of the income categories were statistically significant. However, the beta coefficients were not interpreted because of the non-significance of the overall model. There was no statistical evidence to reject Null Hypothesis 7.

Table 21

Linear Regression With Income Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	VIF
Income (reference: Less than \$20,000)						
\$20,000 – \$29,999	-0.73	0.23	-.27	-3.14	.002	1.88
\$30,000 – \$39,999	-0.30	0.20	-.15	-1.47	.143	2.72
\$40,000 – \$49,999	-0.22	0.20	-.11	-1.08	.282	2.67
\$50,000 – \$59,999	-0.42	0.22	-.18	-1.95	.052	2.17
\$60,000 – \$69,999	-0.28	0.21	-.13	-1.35	.179	2.36
\$70,000 – \$79,999	-0.37	0.20	-.20	-1.89	.060	2.96
\$80,000 – \$89,999	-0.50	0.23	-.19	-2.19	.030	1.98
\$90,000 – \$99,999	-0.37	0.24	-.13	-1.56	.120	1.83
\$100,000 or more	-0.35	0.20	-.19	-1.78	.076	2.96

Note. $F(9, 250) = 1.43, p = .174, R^2 = .049$

RQ8: What is the relationship between employment status and rural residents' perceptions toward LEOs?

H_{08} : There is no significant relationship between employment status and rural residents' perceptions toward LEOs.

H_{a8} : There is a significant relationship between employment status and rural residents' perceptions toward LEOs.

To address RQ8, a multiple linear regression was conducted to examine the relationship between employment status and rural residents' perceptions toward LEOs. For the regression, part-time was treated as the reference group. Employment status did not have a significant contribution to perceptions toward LEOs, $F(5, 275) = 1.07, p = .378, R^2 = .019$ (see Table 22). Employment status accounted for approximately 1.9% of the variance in perceptions toward LEOs. Because of the non-significance of the F test, the individual employment status categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 8.

Table 22

Linear Regression With Employment Status Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	VIF
Employment status (reference: Part-time)						
Full-time	-0.23	0.12	-.14	-1.85	.066	1.68
Not employed – looking for work	-0.49	0.32	-.10	-1.52	.130	1.12
Not employed – not looking for work	-0.18	0.32	-.04	-0.55	.581	1.12
Retired	-0.36	0.19	-.14	-1.88	.061	1.46
Disabled	-0.14	0.69	-.01	-0.21	.836	1.03

Note. $F(5, 275) = 1.07, p = .378, R^2 = .019$

RQ9: What is the relationship between educational attainment and rural residents' perceptions toward LEOs?

H_{09} : There is no significant relationship between educational attainment and rural residents' perceptions toward LEOs.

H_{a9} : There is a significant relationship between educational attainment and rural residents' perceptions toward LEOs.

To address RQ9, a multiple linear regression was conducted to examine the relationship between educational attainment and rural residents' perceptions toward LEOs. For the regression, less than high school was treated as the reference group. Educational attainment did have a significant contribution to perceptions toward LEOs, $F(8, 273) = 2.72, p = .007, R^2 = .074$ (see Table 23). Educational attainment accounted for approximately 7.4% of the variance in perceptions toward LEOs. Because of the significance of the F test, the individual educational attainment categories were analyzed further.

High school graduates ($t = -2.56, p = .011$) scored 0.64 units lower on perceptions toward LEOs than participants who had less than a high school experience.

Participants with some college ($t = -2.26, p = .024$) scored 0.53 units lower on perceptions toward LEOs than participants who had less than a high school experience. Participants with an associate's degree ($t = -3.66, p < .001$) scored 0.85 units lower on perceptions toward LEOs than participants who had less than a high school experience. Participants with a bachelor's degree ($t = -3.09, p = .002$) scored 0.69 units lower on perceptions toward LEOs than participants who had less than a high school experience. Participants with a master's degree ($t = -2.55, p = .011$) scored 0.57 units lower on perceptions toward LEOs than participants who had less than a high school experience. There was statistical evidence to reject Null Hypothesis 9.

Table 23

Linear Regression With Educational Attainment Predicting Perceptions Toward LEOs

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	VIF
Educational attainment (reference: Less than high school)						
High school	-0.64	0.25	-.26	-2.56	.011	3.03
Some college	-0.53	0.23	-.28	-2.26	.024	4.36
Vocational	-0.48	0.30	-.13	-1.63	.105	1.93
Associates	-0.85	0.23	-.45	-3.66	<.001	4.36
Bachelors	-0.69	0.22	-.46	-3.09	.002	6.49
Masters	-0.57	0.22	-.36	-2.55	.011	6.01
Doctorate	0.38	0.51	.05	0.73	.463	1.19
Professional	-0.29	0.39	-.05	-0.74	.459	1.38

Note. $F(8, 273) = 2.72, p = .007, R^2 = .074$

RQ10: What is the relationship between immigration status and rural residents' perceptions toward LEOs?

H_{010} : There is no significant relationship between immigration status and rural residents' perceptions toward LEOs.

H_{a10} : There is a significant relationship between immigration status and rural residents' perceptions toward LEOs.

To address RQ10, a multiple linear regression was conducted to examine the relationship between immigration status and rural residents' perceptions toward LEOs. For the regression, U.S. citizen was treated as the reference group. Immigration status did not have a significant contribution to perceptions toward LEOs, $F(2, 277) = 1.68, p = .188, R^2 = .012$ (see Table 24). Immigration status accounted for approximately 1.2% of the variance in perceptions toward LEOs. Because of the non-significance of the F test, the individual immigration status categories were not analyzed further. There was no statistical evidence to reject Null Hypothesis 10.

Table 24

Linear Regression With Immigration Status Predicting Perceptions Toward LEOs

Variable	B	SE	β	t	p	VIF
Immigration status (reference: U.S. citizen)						
Permanent	1.24	0.68	.11	1.83	.069	1.00
Not US citizen	0.05	0.34	.01	0.15	.881	1.00

Note. $F(2, 277) = 1.68, p = .188, R^2 = .012$

Summary

The findings showed how the demographic IVs correlated with the DV of rural residents' perceptions of LEOs. Included in Chapter 4 was information about the data collection and analysis protocols, ways that the data were representative of the rural population, and application of the statistical tests. Descriptive statistics that characterized the sample were provided, along with the inferential statistics organized by the

hypotheses. Overall, a significant contribution was made by the IV of educational attainment.

Based on the findings, the null hypothesis for educational attainment was rejected in favor of the alternative hypotheses. However, the remaining null hypotheses were not rejected. Chapter 5 provides an interpretation and discussion of the findings. Also presented are the limitations of the study, implications for social changes, and recommendations for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative correlational study was to determine if there was a relationship between the IVs of age, gender, ethnicity, religion, marital status, sexual orientation, income, employment status, educational attainment, and immigration status and the DV of rural residents' perceptions toward LEOs. Previous researchers suggested that multiple factors, including personal experiences, might impact individuals' perceptions of LEOs (Alberton & Gorey, 2018; Antrobus et al., 2015; Dai & Jiang, 2016; Flexon et al., 2016). Variables impacting perceptions include news articles, regardless of the veracity or lack thereof, of those comments (E. J. Lee et al., 2017). The media as a whole also appear to impact perceptions, particularly if the media appeal to individuals' political ideologies (Feldman et al., 2017).

Other variables, such as police-involved shootings, might impact perceptions of events (Wen et al., 2015). Police violence in general could lead to psychological trauma that may result in negative perceptions of police actions (Dennis, 2015). The research literature indicated that police actions involving violence often have multiple negative consequences for the individuals involved and might provoke negative perceptions toward the police (Celestin & Kruschke, 2019; Luo et al., 2017; Morrell & Currie, 2015).

Age has been identified as another factor linked to increased negative perceptions toward LEOs. Older individuals tend to view the police as being more legitimate and have more positive perceptions toward the police (Reynolds, Estrada-Reynolds, & Nunez, 2018). Researchers have noted that the younger individuals are when they are

impacted by negative police actions, the more likely it will be that those negative perceptions will persist over the years (Van Damme & Pauwels, 2016).

Researchers have examined multiple variables that might impact perceptions toward LEOs. The current study was timely given the number of police-involved shootings that have occurred in the recent decade, including shootings in Ferguson, Missouri (Chaney & Davis, 2015); Charlotte, North Carolina (Larimer, 2016); and Baltimore, Maryland (Wen et al., 2015). Each of these shootings threatened to generate negative perceptions toward LEOs. The current study addressed rural residents' perceptions toward LEOs. Data were collected from individuals living in southeastern Colorado. Demographic data were collected directly from participants, and their perceptions were captured using the POPS (Nadal & Davidoff, 2015).

Key findings from the study suggested that rural residents had positive perceptions of LEOs but were indifferent to whether LEOs treat all people fairly and do not discriminate. The POPS score indicated that the rural residents were more likely to agree that the police act in a proper manner ($M = 3.76$, $SD = 0.67$). However, educational attainment was the only statistically significant predictor of rural residents' perceptions toward LEOs.

Interpretation

Age

Results indicated that senior adults and adolescents were those most likely to feel that the police acted properly, whereas participants between the ages of 21 and 59 years were those most likely to feel that the police acted improperly. This finding indicated an

age-based difference in the participants' perceptions of police actions being proper or improper. However, differences between the age groups were not statistically significant.

Previous studies have indicated that exposure to police violence may influence perceptions of LEOs (Afon & Baniora, 2016; Dennis, 2015; Wu, 2014). Previous results also indicated that older citizens held positive perceptions of the police, which is similar to the findings of the current study, and that younger individuals had negative perceptions of the police in part because there were more opportunities for them to be exposed to conditions that might have led to these negative perceptions. The current results were only partly consistent with previous findings while adding novel information to the literature, especially regarding how senior adults and adolescents looked favorably toward LEOs.

Gender

Results indicated that men were more likely than women to have favorable perceptions toward LEOs, suggesting a gender-based difference in perceptions of police action being proper or improper. The findings conflicted with those of Dai and Jiang (2016), who found no gender differences in participants' perceptions toward police. Dai and Jiang also found that women in Australia were more likely than men to have positive views of the police. Other research has indicated that women have had more positive perceptions toward law enforcement than men have had (Afon & Bandiora, 2016; Ivkovic, 2008; Miller & D'Souza, 2016). There were no consistent indications in the literature whether gender influenced perceptions of the police. In the current study, men

perceived LEOs more favorably than women did; however, this was not statistically significant.

Ethnicity and Race

Results showed that American Indians, followed by individuals of multiple ethnicities and White individuals, were the most likely to hold favorable perceptions of the police. In contrast, Blacks, followed by Latinos, were the least likely to hold favorable opinions of the police. However, this result did not indicate a statistically significant, ethnicity-based difference in perceptions of police action being proper or improper.

Previous research has indicated that ethnic minorities held different perspectives from Whites regarding the appropriateness of the police using force (Girgenti-Malone et al., 2017). According to the literature, Blacks also have held less favorable perceptions toward law enforcement than Whites and Latinos have (Nadal et al., 2017). Wu (2014) concluded that Blacks, Asians, and Latinos were more likely than Whites to believe that police officers hassled residents rather than acted in helpful ways. Results of the current study were consistent with those of several previous studies indicating that ethnic minorities were less likely to perceive LEOs favorably.

Religious Affiliation

Results showed that Mormons were more likely than Protestants and Roman Catholics to hold favorable perceptions of police. Atheists, Jehovah's Witnesses, and participants who classified their religious beliefs as Other or No Religious Preference were the least likely to perceive police actions as proper. Results did not indicate that

there was a statistically significant religious-based difference in participants' perceptions of police action being proper or improper.

Marital Status

Results showed that individuals who were separated from their partners were more likely than participants who were divorced or widowed to hold favorable perceptions toward LEOs. Participants who were married or in domestic partnerships, as well as those who were single, were the least likely to hold favorable perceptions toward LEOs. There was not a statistically significant marital status-based difference in perceptions of LEOs' actions being proper or improper. I found scant literature regarding marital status and perceptions of police, but Zahnow et al. (2017) found that participants who were married had greater confidence in the police. Results of the current study conflicted with the scant literature on the topic.

Sexual Orientation

Results showed that bisexual individuals were more likely than heterosexual, lesbian and gay, and transgender individuals to hold unfavorable perceptions toward LEOs. Heterosexual participants were the most likely to have positive or favorable perceptions toward LEOs' behavior. There was not a statistically significant sexual orientation-based difference in the participants' perceptions of LEOs' actions being proper or improper. Any difference was primarily between participants who identified as bisexual and those who identified as straight, gay, or transgender.

Previous research has indicated the dissatisfaction of transgender individuals with their experience with the police (Stotzer, 2009). Results of the current study partly

conflicted with previous results. Individuals who have identified as lesbian, gay, bisexual, transgender, and intersex also in general have reported negative perceptions toward LEOs (Miles-Johnson, 2013). Results of the current study conflicted with results in the literature on this issue, with only transgender individuals demonstrating significantly more negative perceptions toward LEOs than people of other sexual orientations.

Income

Results showed no statistically significant differences in income and perceptions toward LEOs. Income was categorized in \$10,000 segments, and the participants who rated LEOs the most favorably was those earning less than \$20,000/year, with participants earning between \$20,000 and \$29,999 as the most likely to rate LEOs the least favorably. There was an income-based difference in participants' perceptions of LEOs' actions being proper or improper. Given that there has been little research on the impact of occupation and income on perceptions toward LEOs, the results served as a novel addition to the literature.

Employment Status

Results did not show a statistically significant difference in employment status and perceptions toward LEOs. However, participants who worked part-time jobs (categorized as employment of less than 40 hours a week) were more likely than participants who were disabled and not able to work at all, employed and not looking for work, employed at full-time jobs and worked at least 40 hours per week, retired, and not employed but looking for work to rate the police favorably. There was not a statistically

significant employment status-based difference in the participants' perceptions of LEOs' actions being proper or improper.

Educational Attainment

Results showed that participants who had doctoral degrees were more likely than participants without at least a high school degree and those with a professional degree to have favorable perceptions of the police. A range of educational attainment fell within the category of participants who looked less favorably on police behavior, including individuals with master's degrees and associate's degrees. Participants who had a high school degree ($t = -2.56, p = .011$), some college ($t = -2.26, p = .024$), an associate's degree ($t = -3.66, p < .001$), a bachelor's degree ($t = -3.09, p = .002$), and a master's degree ($t = -2.55, p = .011$) tended to have lower perceptions than those who had less than a high school education. Those with more college education tended to view LEOs less positively. These results conflict with much of the current literature, which indicated that higher levels of education contribute to more positive perceptions of LEOs (Afon & Badiora, 2016; Dai & Jiang, 2016; Taylor et al., 2015; Wu, 2014). A study in Texas showed a relationship between higher levels of education and perceiving the police less favorably (Luo et al., 2017).

Similar to research on occupation and income, there has been limited research on the impact of educational attainment on the perceptions of LEOs. Dai and Jiang (2016) indicated that participants with a college education were more likely to have a positive view of the police, whereas Luo et al. (2017) reported that participants who had more education perceived police less favorably. The results of the current study indicated a

trend regarding higher educational attainment and perceptions toward LEOs, which was consistent with the conflicting findings in the literature. Even though there was a trend in higher educational attainment and perceptions toward LEOs, it conflicted with much of the literature in that individuals with less than a high school education perceived LEOs more positively than those with a higher level of education.

Immigration Status

Results showed that permanent residents of the United States tended to be more likely than non-U.S. citizens and U.S. citizens to have favorable perceptions toward LEOs. There was not a statistically significant immigration status-based difference in the participants' perceptions of LEOs' actions being proper or improper. Previous research had not provided a clear perspective of how the number of years spent in the United States impacted perceptions toward LEOs. However, the literature indicated that some foreign-born citizens have held more positive views (Wu, 2014) and others have held more negative views (Theodore & Habans, 2016). The results added to a complicated body of literature on immigration status and perceptions toward LEOs that did not clearly indicate how immigration status impacted perceptions.

Limitations

There were several limitations in the study that influenced the generalizability of the findings. The first limitation was that some of the participants knew me because of the proximity between where I live and where the study was conducted. Although the potential relationship could have introduced a systematic error that could have affected

the investigation, the study was conducted online. This ensured the anonymity of the participants and mitigated the limitation.

The second limitation was researcher bias toward law enforcement. I had preexisting perceptions toward LEOs and their behavior, which could have threatened the results of the study. However, this limitation was mitigated through use of a quantitative survey, which did not allow me to influence the findings.

The third limitation was the use of an Internet-based survey. There was a chance that some participants could have completed the survey more than once, an issue that could have resulted in an erroneous analysis of the data. The study also inadvertently excluded individuals without Internet access, which may have skewed the data. Because of these limitations, the generalizability of the results was limited. The geographic location of the sample population also was considered a limitation of the study. Rural areas of the country can vary in population densities, occupations, demographics, cultures, geographies, economics, and social circumstances (Johnson, 2017; Parker et al., 2018; Roberts et al., 2016). Because the study population was limited to a specific geographic location, different results might have occurred if a different geographic location had been studied.

Recommendations

For law enforcement organizations attempting to improve their relationships with the public, the findings suggest that some parts of the population are likely to have negative opinions toward these organizations. Interventions designed to improve relationships with the public should focus on this population cohort. The major findings

led to one broad recommendation: Attempts to improve relationships with the public should target individuals based on specific criteria that include, but are not limited to, age, gender, religious affiliation, ethnicity, marital status, sexual orientation, income, employment, educational attainment, and immigration factors. More targeted interventions may be developed by exploring perceptions toward LEOs between categories rather than within categories, which was conducted within this study.

Researchers could draw from the findings of this study and compare them to identify the factors that could most heavily impact perceptions toward LEOs. I used linear regression analyses to determine which subcategories of broader categories, such as specific ethnicities within the larger category of ethnicity, were the most likely to perceive law enforcement favorably or unfavorably. Researchers could examine the subcategories with the least favorable perspectives toward LEOs and assess them to determine which subcategory was the most highly associated with negative perceptions toward LEOs. Researchers could then attempt to design interventions to appeal to individuals with the least favorable perceptions toward LEOs to improve relationships with them.

Implications

Examining the perceptions of residents in rural areas toward LEOs has implications for positive social change by helping LEOs better understand the residents whom they serve. Negative perceptions about the police often form when residents believe that they are being mistreated during encounters with LEOs (Gau & Brunson, 2015). Thirty-eight percent of people do not trust LEOs, even if they have not seen any

corruption (Mattes, 2016). Perceptions of fairness and effectiveness by the police contribute to increased cooperation (White et al., 2016). When people feel that LEOs are treating them fairly, they are less likely to believe that LEOs have profiled them (Meares et al., 2016). The results of this study were not statistically significant, except for educational attainment, but show trends in perceptions toward LEOs. Further research could help examine possible relationships between perceptions and multiple variables. Positive social change could occur if current findings can be integrated into LEOs' training to improve the relationships between LEOs and the residents they serve.

Conclusion

Negative events associated with police officers, such as police-involved shootings, may generate negative feelings toward law enforcement. Multiple shootings throughout the U.S. involving the police were covered in the media, though negative perceptions toward the police differed within groups. Previously existing research indicated that among other factors, specific ethnic groups, specific income brackets, and people with specific educational attainment all had differing perspectives regarding law enforcement. Similar findings were identified within this study, though differing perspectives toward LEOs sometimes agreed with and at other times conflicted with previous findings.

Results did not indicate with any statistical significance that perceptions toward LEOs were different within categories. Educational attainment was the only variable that showed a significant difference between categories. Results reinforced previous findings regarding perceptions toward the police (e.g., older people had more favorable

perceptions, and minorities had more negative perceptions) while adding novel entries to the literature (i.e., rural residents' perceptions vs. urban residents' perceptions). Even though there was not a significant difference between the IVs, overall, residents had positive perceptions of LEOs. Residents perceived LEOs as friendly ($M = 3.86$, $SD = 0.70$) and helpful ($M = 4.11$, $SD = 0.72$). Residents also agreed that they like LEOs ($M = 4.08$, $SD = 0.80$), LEOs protect them ($M = 4.12$, $SD = 0.83$) and are good people ($M = 3.90$, $SD = 0.75$), provide safety ($M = 4.11$, $SD = 0.78$), are trustworthy ($M = 3.73$, $SD = 0.84$), are reliable ($M = 3.78$, $SD = 0.83$), and care about their community ($M = 4.01$, $SD = 0.85$). However, the participants were indifferent as to whether the police officers treat all people fairly ($M = 3.21$, $SD = 1.02$), the police do not discriminate ($M = 3.14$, $SD = 0.97$), and police officers are unbiased ($M = 3.11$, $SD = 0.92$). Using the data obtained from this study, interventions could be developed to improve the relationship between individuals with the most negative perceptions and LEOs.

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Appendix A: Demographic Questionnaire and Perceptions of Police Scale (English)

1) What is your age?

- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

2) Which category best describes your race or ethnicity?

- White/Caucasian
- Black or African-American
- Hispanic or Latino
- American Indian or Alaskan Native
- Asian or other Pacific islander
- Native Hawaiian
- Multiple ethnicities
- Other

3) What is your gender?

- Male
- Female
- Other
- Prefer not to respond

4) What is your sexual orientation?

- Heterosexual/Straight
- Lesbian
- Gay
- Bisexual
- Transgender
- Other
- Prefer not to respond

5) What is your marital status?

- Single (never married)
- Married or domestic partnership
- Widowed
- Divorced

- Separated
- Other

6) What is your annual household income?

- Less than \$20,000
- \$20,000 – \$29,999
- \$30,000 – \$39,999
- \$40,000 – \$49,999
- \$50,000 – \$59,999
- \$60,000 – \$69,999
- \$70,000 – \$79,999
- \$80,000 – \$89,999
- \$90,000 – \$99,999
- \$100,000 or more
- Prefer not to respond

7) Which of the following categories best describes your employment status?

- Employed part-time (less than 40 hours per week)
- Employed full-time (40 or more hours per week)
- Not employed, looking for work
- Not employed, NOT looking for work
- Retired
- Disabled, not able to work

8) What is the highest level of education you have completed?

- Less than high school degree
- High school degree or equivalent (e.g., GED)
- Some college but no degree
- Vocational degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate degree
- Professional degree
- Other (please specify)

9) What is your religious preference?

- Roman Catholic
- Protestant
- Muslim

- Jewish
- Mormon
- Atheist
- Jehovah's Witness
- Other (please specify)
- No religious preference

10) What is your citizenship status?

- United States citizen
- Naturalized citizen
- Permanent resident
- Not a citizen of the United States

11) What is your country of birth?

- United States
- Mexico
- Other (please specify)

12) If you are an immigrant, how long have you lived in the United States?

- Less than 5 years
- 5 to 10
- 11 to 20
- 21 to 30
- More than 30
- Not applicable
- Prefer not to respond

Directions: Below are questions regarding perceptions of the police in the United States. Using the 5-point scale, please rate how much you personally agree or disagree with each statement by clicking your response.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Police officers are friendly	1	2	3	4	5
Police officers protect me	1	2	3	4	5
Police officers treat all people fairly	1	2	3	4	5
I like the police	1	2	3	4	5
The police are good people	1	2	3	4	5
The police do not discriminate	1	2	3	4	5
The police provide safety	1	2	3	4	5
The police are helpful	1	2	3	4	5
The police are trustworthy	1	2	3	4	5
The police are reliable	1	2	3	4	5
Police officers are unbiased	1	2	3	4	5
Police officers care about my community	1	2	3	4	5

Appendix B: Demographic Questionnaire and POPS (Spanish)

1) ¿Qué es su edad?

- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 ó mas grande

2) ¿Cuál categoría describir su raza ó etnicidad?

- Blanco/caucásico
- Moreno ó Afroamericano
- Hispano ó Latino
- Indio Americano
- Asiático ó isleño pacífico
- Hawaiano Nativo
- Etnias multiples
- O otro

3) ¿Qué es su género?

- Hombre
- Mujer
- Otro
- Prefiero no responder

4) ¿Qué es su orientación sexual?

- Heterosexual
- Lesbiana
- Homosexual
- Bisexual
- Transgénero
- Otro

5) ¿Qué es su estado civil?

- Soltero/Soltera
- Casado ó Asociación doméstica
- Viudo
- Divorciado
- Separado
- Otro

6) ¿Qué es su ingreso anual?

- Menos de \$20,000
- \$20,000 – \$29,999
- \$30,000 – \$39,999
- \$40,000 – \$49,999
- \$50,000 – \$59,999
- \$60,000 – \$69,999
- \$70,000 – \$79,999
- \$80,000 – \$89,999
- \$90,000 – \$99,999
- \$100,000 o más
- Prefiero no responder

7) ¿Cual de las categorías mejor describe su situación laboral?

- Empleo tiempo parcial (menos de 40 horas por semana)
- Empleo tiempo completo (40 o más por semana)
- Sin empleo, buscando trabajo
- Sin empleo, no está buscando trabajo
- Retirado
- Discapacitado, no puede trabajar

8) ¿Cuál es su nivel de educación más alto?

- Menos que la escuela secundaria
- Secundaria
- Un poco de Universidad, pero no licenciatura
- Título vocacional
- Grado de asociado
- La Licenciatura
- La Maestría
- El Doctorado
- O otro (por favor especifica)

9) ¿Cuál es su religión preferida?

- Católica
- Protestante
- Musalmano
- Judío
- Ateo
- Testigo de Jehová
- Otro (Por favor especifica)
- No tengo religión preferida

10) ¿Cual es su estatus de ciudadanía?

- Ciudadano
- Ciudadano naturalizado
- Ciudadano permanente
- No soy ciudadano de Los Estado Unidos

11) ¿Cuál es su país de nacimiento?

- Estados Unidos
- México
- Otro (por favor especifica)

12) ¿Si es inmigrante, cuánto tiempo a vivido en Los Estado Unidos?

- Menos de 5 años
- 5 a 10
- 11 a 20
- 21 a 30
- Mas de 30
- No corresponde
- Prefiero no responder

Instruccions: Abajo hay preguntas respecto a las percepciones sobre la polecía de los Estados Unidos. Usando escala de 5 puntos, por favor escoje cuanto usted esta de acuerdo o no de acuerdo con cada declaración, rodeando su respuesta.

	Muy en Desacuerdo	Desacuerdo	Neutral	Acuerdo	Muy en Acuerdo
La policia es amable	1	2	3	4	5
La policia me protege	1	2	3	4	5
La policia trata a toda la gente justamente	1	2	3	4	5
Me gusta la policia	1	2	3	4	5
La policia es buena gente	1	2	3	4	5
La policia no discrimina	1	2	3	4	5
La policia proporciona seguridad	1	2	3	4	5
La policia es servicial	1	2	3	4	5
La policia es digna de confianza	1	2	3	4	5
La policia es confiable	1	2	3	4	5
Los oficiales de policia son imparcial	1	2	3	4	5
La policia se preocupa por la comunidad	1	2	3	4	5

Appendix C: Permission to Use POPS

Tue 10/23, 11:57 AM
Joseph Wagner

Dear Joe,

You can use the POPS. Please visit www.kevinnadal.com/research and follow instructions for usage.

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