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PERSONALITY AND PERCEIVED STRESS IN RURAL POLICE OFFICERS

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Psychology

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Indiana University of Pennsylvania

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The purpose of this study was to explore the link between personality and stress in rural officers, an understudied population. Previous research has identified policing as a stressful profession, connected to poor outcomes, both occupationally and personally. A link between personality and the perception of stress has also been established. The scant previous research on rural policing suggests that they experience different stressors than their urban and suburban counterparts, with different resources to manage that stress. Using a sample of 132 rural police officers, this study explored the link between police stress, overall stress and the Big Five Personality traits. Results show that rural officers scored similarly on the big five as previous research, high in conscientiousness and extraversion, low in neuroticism and openness, and average on agreeableness. Rural officers reported experiencing average levels of overall stress as compared to the general population. Additionally, they reported experiencing the same levels of operational stress as their suburban and urban counterparts. Finally, rural officers reported experiencing decreased levels of organizational stress as compared to other police officers. The implications, clinical and policy related, are discussed.

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CHAPTER 1

INTRODUCTION

Police work is consistently rated as one of the most stressful occupations (Pendleton, Stotland, Spiers, & Kirsch, 1989). Indeed there is often the possibility of danger and bodily injury when responding to a call with unknown factors. Officers are required to manage and deal with the stressors they face often with little official assistance or support, aside from a strong police culture, which may often eschew professional help (Twersky-Glasner, 2005). The ability of officers to adequately deal with the stress of their occupation is important to how to they perform their job, including how they handle ambiguous situations where danger may or may not be present for themselves or others (Why et al., 2003). How they deal with the stressors is heavily dependent on their coping skills, personal resilience factors and personality traits. In fact, personality has been found to be highly correlated to coping skills and coping effectiveness for police officers (Detrick & Chibnall, 2006). Because of the impact that personality has on how officers deal with stress, it has become a standard part of police officer screening procedures. There has been much research into which personality traits are correlated with poor officer outcomes like abuse of power and poor public relations (Sanders, 2008). Additionally, there has been some research into which personality characteristics are related to positive officer outcomes like respect for the population and responsible use of force (Detrick & Chibnall, 2006). Almost all the research into police personality and police stress, however, has been with large departments serving metropolitan populations (Weisheit, Falcone, & Wells, 2005). There are questions as to whether these findings generalize to smaller departments serving rural populations.

The Current Study

The current study seeks to identify how rural police officers perceive occupational and general overall stress and to see whether it differs from what has been identified so far for their urban counterparts. It also seeks to differentiate the personality profiles of rural police officers from the typical police personality identified in the literature. This is an important issue to examine as the policing needs of rural and urban populations differ and thus the police that serve them differ in their expected function and ability to integrate with the people they serve (Weisheit, Falcone, & Wells, 2005). These differences in police function suggest that there are likely some personality differences between the two types of police officers that enable them to fulfill two relatively different roles. Finally, the current study seeks to identify personality characteristics that are related to stress resiliency.

CHAPTER 2

REVIEW OF THE LITERATURE

Police Personality

Police personality is well researched because at its core, personality determines the way that an officer handles incoming stimuli, assigns meaning to events, and formulates reactions, which could involve the use of lethal force. By screening for personality facets that have been correlated with poor police performance, and to a lesser extent successful police performance, departments lessen the cost and time needed to train officers that then are released from service because of unsatisfactory performance as well as shield the public from officers who may be more likely to misuse the force and authority given to them by the state (Inwald & Shusman, 1984).

In order to understand what makes up a "police personality" and how it might be developed, it is fruitful to discuss what personality is. Personality theory is as important to understanding police personality as is the unique experiences that make up police work (Twersky-Glasner, 2005).

According to Kelly (1955) personality is "our abstraction of the activity of a person and our subsequent generalization of this abstraction to all matters of his relationship to other persons, known and unknown, as well as anything else that may seem particularly valuable" (p. 220). Kelly seems to imply that police personality would primarily be formed by the activities that the police officer participates in, once he or she is on the job. This view of police personality would preclude the usefulness of pre-employment personality screening measures that are usually part of the psychological evaluation required to be hired as a police officer. Another approach comes from Allport (1937) who stated that personality is made up of major and minor

traits, and that traits are made up of a mixture of biological, psychological, and sociological factors that dispose an individual to act in a specific way under specific circumstances. Allport's model of personality can be termed a predispositional model, as he theorized that it predisposed people to act in certain ways. According to this model, the ideal police officer personality would need to be agreed on, either through expert opinion or empirical research, then all those that fit the criteria would be the ideal police officer.

A more balanced approach comes from Kohut and Wolff (1978) in which personality is a result of the interaction between the person and his "mirroring and idealizing self-objects". This theory of personality allows that the individual may be predisposed to certain action but that the environment shapes how the individual develops. According to this view, police personality is partly predisposed before the police officer became an officer, but also partly developed through experiences that they have while doing the job.

The popular media often idealizes police officers as having certain characteristics such as machismo, bravery, authoritarianism, cynicism and aggression (Twersky-Glasner, 2005). However, what may not be known by the general public is that police officers go through a strict hiring process in order to "weed out" some candidates and help select the best candidates. This happens through two ways: weeding out and selecting in. While the majority of the selection process is a weeding out of undesirable traits, experts agree that selecting in is far more useful, but also far more difficult to do (Sanders, 2008). This selection process provides a baseline by which to examine how different experiences might affect officers differently, as some of the same characteristics are present, on average. Additionally the selection process weeds out those with preexisting psychological conditions, which removes potentially confounding variables when examining the effects of police work on the officer as a whole.

The selection process has many facets, which generally include a physical fitness exam, multiple interviews, a background check, a public service exam, some sort of deception detection test (i.e. polygraph) and, most important for the purposes of this study, a psychological screening. These screenings are conducted by psychologists who utilize an interview and most often a personality inventory, like the Minnesota Multiphasic Personality Inventory 2 (MMPI-2) (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) or the California Personality Inventory (CPI) (Gough, 1987) (Chibnall, & Detrick, 2003).

The use of personality inventories and other behavioral measures has a long history in police officer selection but became commonplace in nearly all departments in the 1970s after the 1967 President's Commission on Law Enforcement and Administration of Justice recommended psychological testing for police officer candidates (Ho, 2001). The usefulness, reliability and validity of using psychological tests, especially personality inventories, to screen out "unfit" candidates has been challenged repeatedly (Ho, 1999; Murphy, 1972; Winters, 1992). However, the US Supreme Court, in the case *Griggs v. Duke Power Company* (1971) upheld that the use of such tests as selection criteria is legal in employment screenings, as long as the tests show a reasonable prediction of job performance. The Court also upheld their use for police selection, even though they disqualify a disproportionate number of minorities (*Washington v. Davis*, 1976).

Another factor that needs to be considered when discussing police personality is the effect of police culture on officers. Jerome Skolnick (1966) explored how police culture affects personality in police officers. He discussed the sense of isolation and distrust that many officers feel. These feelings come together in officers to form what Skolnick called the working personality, which is made of three parts: danger, authority and efficiency. The danger

component makes police officers suspicious of people's behaviors. Because of these suspicions the officers will isolate himself/herself from the public and associate more frequently with other officers (Skolnick, 2000). The danger associated with the job draws officers together and isolates them from the community at large. The feelings of authority also separate the officer from the public and feed the sense of isolation (Twersky-Glasner, 2005). These aspects of Skolnick's (1966) working personality serve to reinforce the isolation and alienation that police officers report (Skolnick 1966; Ankony, 1997). Skolnick notes that the feelings of isolation and alienation will only drive the officer away from society if he perceives hostility from the public, taking refuge in association with other police officers. Skolnick's (1966) model of working police personality has been supported by other researchers. Balch (1977) reported that there was a consensus among researchers on some police personality characteristics, namely: suspicion, conventionality, cynicism, prejudice, and distrust of the unusual. The idea of a working personality has continued with the work of Paoline, Myers and Worden (2000) who characterized the working personality with "uncertainty, danger and coercive authority." Paoline and colleagues (2000) present yet another possible source of the police personality, the police subculture. They posit that officers are members of a subculture, which provides them with a working personality. Because this is only a working personality, officers still retain individual differences in temperament and traits. Police training that emphasizes the danger of the work and the need for solidarity with other officers feeds an "us vs them" mindset that encourages the activation and use of the police officer working personality.

The two theories most often referenced in discussions of how police personality forms are Allport's predispositional model, suggesting that people with certain characteristics are drawn to police work (Allport, 1937), and Kelly's experiential model, which alternately argues

that police personality is something acquired through job experience (Kelly, 1955). The available research, however, does not clearly support one theory over the other. Some research has found that traits that police officers have that differentiate them from the general population are found even before they become police officers and may indeed be one of the driving forces behind their becoming officers in the first place (Bennett & Greenstein, 1975). This would support the predispositional model. However, this predispositional model was studied empirically by comparing police science students attempting to get into the police academy to other students not planning on becoming police officers (Bennett & Greenstein, 1975). The results showed no difference in traits between the student groups, but significant differences in traits between the student groups, but significant differences in traits between the student and not a predispositional model. However, these results have not been studied extensively and remain only one of several possible options.

Many different researchers have examined what characteristics make up a "good" officer and which make up a "bad" officer; however, this area is another in which the field lacks consensus (Bartol, 1991). In early studies it was found that "good" policemen were masculine, assertive, dependable, and uncomplicated (Hogan, 1971; Sanders, 2008). Early researchers had a fluid definition of what a good police officer might be; often appearing to believe that what defines a good police officer was something that was generally understood. As stated above, other early studies identified more negative traits as part of the typical police officer, including: suspicion, conventionality, cynicism, prejudice, and distrust of the unusual (Balch, 1977). It appears that officers in those early studies tended to exhibit conforming behavior, perhaps as part of their desire to be in the police culture, rather than actually sharing personality traits (Sanders,

2008). More recent research has uncovered more specific, desirable traits in polices officers, including: emotionally controlled, slow to anger, steady under stress, assertive, guarded about the motives of others, conscientious, goal orientated and disciplined (Detrick & Chibnall, 2006). It is important to note that many characteristics that are desirable in police officers, such as honesty, dependability, intelligence, goal-oriented, persistent, and organized, tend to be desirable in other jobs as well (Mount & Barrick, 1998). While personality traits can be good predictors of job performance in general, generalized characteristics that don't separate out "good" or "bad" police officers have little predictive validity as they are not sensitive enough to discriminate between those that may excel in police work and those that may decline (Sanders, 2008).

Since the selection process can use a variety of personality inventories, to avoid confusion it is useful to discuss police personality using the most generally accepted personality structure, the Big Five factor model (Digman, 1990). Research has shown that the Big Five model is related to job performance, both positive and negative, for a variety of professions, including policing (Mount & Barrick, 1998). The Big Five is a structure model of personality that divides itself into five broad categories or constructs: Extroversion, openness, agreeableness, conscientiousness, and neuroticism (Digman, 1990). Together it is believed that these five categories account for the totality of an individual's personality. These five constructs appear across many theoretical frameworks, using different instruments in a variety of samples (Cortina, Doherty, Kaufman & Smith, 1992).

Extroversion is sometimes called assertiveness and is in contrast to introversion (Digman, 1990). It has also been viewed as sociability and ambitiousness (Detrick, & Chibnall, 2006). It is usually seen as a positive quality. Extraverts tend to have higher salaries than introverts and are more satisfied with their careers (Heller, Judge, & Watson, 2002). Extraversion is moderately

correlated with positive police officer performance (Mount & Barrick, 1991) and was reported by training officers to be a desirable characteristic, especially in entry level officers (Detrick & Chibnall, 2006).

Neuroticism is the opposite of emotional stability and is associated with moodiness, tension, irritability, high anxiety and discontentment (John & Srivistava, 1999). Neurotics tend to pay more attention to negative events and subjectively feel that they experience more of them, as compared to others (Heller et al., 2002). Neuroticism is generally seen as a negative trait, especially in policing. Its opposite, emotional stability, is often cited as a desirable trait in officers (Detrick & Chibnall, 2006). Neuroticism shows a high negative correction with police work and is predictive of job performance problems (Cortina, 1992).

Agreeableness has been described as likability, compliance, empathy, courteousness, forgiving, and trusting (Digman, 1990). It can also be conceptualized as a continuum with trusting and good natured on one end and cynical and suspicious on the other end (Seibert & Kaimer, 2001). Research on agreeableness and job performance is mixed (Seibert & Kaimer, 2001). While some research has found a correlation between job performance and agreeableness (Mount & Barrick, 1991), most police personality and police performance literature does not mention it as a good predictor for performance (Black, 2000); however, a few studies have linked low agreeableness in police officers to increased workplace misconduct (Cutler & Muchinsky, 2006).

Openness to experience (also known as just openness) can be described as imaginative, curious, original, broad-minded and flexible (Mount &Barrick, 1991). There is some evidence that openness is correlated to intelligence, but the evidence is mixed (Mount & Barrick, 1991). Digman (1990) reported that those high in openness seek out new experiences and thus educate

themselves on a continuing basis, while those that are low in openness do not. Openness has been found to have a moderate correlation to police performance (Mount & Barrick, 1991). However, while openness alone may not be correlated highly with police personality, openness as part of a combination with other personality characteristics, such as conscientiousness, can be predictive of police performance (Detrick & Chibnall, 2006).

Conscientiousness, the final construct of the Big Five, is how organized, dependable, persistent and engaged in goal-directed activity a person is (Digman, 1990). Those high in conscientiousness can be perceived as stubborn and obsessive while those low in conscientiousness can be perceived as sloppy and unreliable (Togel & Barsoux, 2012). Some researchers posit that conscientiousness is the manifestation of the will to achieve, while others believe it is the core trait to dependability (Sanders, 2008). Evidence shows that conscientious people work harder and get more tasks accomplished than non-conscientious people (Heller et al., 2002). Barrick and Mount (1991) found that conscientiousness was the most correlated of all the Big Five constructs with measures of job performance in police officers (see also Black, 2000; Cortina et al., 1992). In a survey of training officers, Detrick and Chibnall (2006) found conscientiousness, or a descriptor that falls under the conscientiousness construct, was one of the most sought after traits in entry level police officers by training officers. In the same study, they determined that levels of conscientiousness could differentiate the high police academy achievers from the low police academy achievers. Assuming that academy position is indicative of police performance on the job, it appears that conscientiousness is a good predictor for positive and negative police performance.

As stated earlier, the police selection process is generally one of "weeding out" candidates with unwanted psychological traits (Twersky-Glasner, 2005). Over the past decade or

so, "selecting in" candidates has garnered more attention, though little data on the subject yet exists. The ideal officer, according to Detrick and Chibnall (2006), is low in neuroticism, high in extraversion and conscientiousness, and average in levels of openness and agreeableness. Their study showed that high academy ranked entry level police officers matched these criteria and lower academy ranked entry level officers varied from the ideal criteria. Cortina et al. (1992) found that the Big five factor most important to performance outcomes was neuroticism, and to a lesser extent, agreeableness. They also found that extraversion, neuroticism and conscientiousness were predictive of turnover rates. It should be noted that Cortina et al. used the results from the MMPI and Inwald Personality Inventory (IPI) measures from serving police officers and applied their own qualitative categorization system to assign the inventory questions to one of the Big five constructs. This method may be prone to unseen error because neither of these personality measures were based on any personality theory, and when the authors created their qualitative categorization system they essentially used expert opinion to decide which questions measured which Big Five factor. This method lacks any empirical support, and may contain errors in how the questions were divided among the Big Five factors

Moving away from the Big Five constructs, Lorr and Strack (1994) examined police candidates using 12 measures of psychopathology and found that most candidates fell into a "typical cop" personality profile. They were found to be self-disciplined, socially bold, extroverted, emotionally tough and experienced low levels of anxiety. Hargrave, Hiatt and Gaffney (1986) used MMPI and CPI data to compare deputies with traffic officers. The traits that the two groups of law enforcement shared were: highly defensive, energetic, dominant, well adjusted, independent, spontaneous, socially flexible, and experienced low anxiety. They also found that introversion was undesirable for both sets of officers. Carpenter and Raza (1987)

examined MMPI profiles for police applicants and found that compared to normative samples, the applicants were more likely to present a positive image of themselves, be less depressed and anxious, more assertive, more energetic, more socially adept, and more psychologically mature. Carpenter and Raza characterized the police populations as being more psychologically healthy and "somewhat different" from the normative sample.

Police Stress

Policing is typically considered to be a stressful occupation. Police stress has been linked to many negative outcomes for police officers, and occasionally the public as well, making police stress an important area of study. Eden (1990) defined stress as the person's perception of the difference between the needs of the situation and their ability to meet those needs. Occupational stress is defined as the transaction between a person and their work environment, with stress arising when the perceived resources are not enough to meet the perceived demand (Cox, Griffiths, & Rial-González, 2000). Another way to conceptualize occupational stress is perceived work stress, or the degree to which a worker feels "strain" or stress associated with their jobs (Karacek & Theorell, 1990).

There are two competing ideas to examine when looking at police stress. The first is that policing is inherently stressful and has unique stressors that are not found in other occupations, leading the officer to be in a near constant state of occupational stress (Pienaar, Rothmann, & Van De Vijver, 2007). The other is that policing is not inherently more stressful than other occupations (Webster, 2013; Hart et al., 1993). The problem that exists in the police stress literature is that many of the studies are exploratory in nature and lack a theoretical framework that can be generalized to other departments, geographic areas, department sizes, and policing philosophies, making it difficult to apply the results from one study to other police departments

(Webster, 2013). While many studies claim that there are unique stressors to police work (Pienaar, Rothmann, & Van De Vijver, 2007), there are others that fail to find a significant relationship between policing and stress (Sigler & Wilson, 1992). These findings cast doubt as to the uniqueness of police stressors as compared to other occupations. While this debate is still ongoing, the current study is based on the assumption that there are some stressors unique to policing for the following reasons. First, while there may not be definitive results showing that policing has unique stressors compared to other occupations, it has been shown that policing is a stressful occupation (Liberman et al., 2002) and there are negative outcomes linked to the stress that police officers do report experiencing such as burnout, absenteeism and early retirement (Anshel, 2000; Kerley, 2005). Another reason that it would be beneficial to err on the side of unique police stressors is that no other occupation requires the same responsibilities or gives the same powers to its employees. Bittner (1970) emphasized the unique nature of policing by outlining that police officers are the only body of persons authorized to use coercive force on fellow citizens within the United States. Because of this unique position, the citizenry has become dependent on police officers in their daily lives for situations that they cannot or will not handle themselves. Additionally, these unique occupational demands, by implication, encourage police officers to unite together under specific beliefs and values (the police culture) that protect them from the demands of the jobs but are also reinforced by the demands of the job (Webster, 2013). A final reason that it seems prudent to side with the argument that policing is uniquely stressful is the potential for harm when officers are operating under extreme stress. To treat policing the same as any other profession regarding stressors would deny the great potential risk of public harm when officers become overstressed. This reason alone should be enough to treat policing as unique from other professions.

It is important to note that many of the stressors faced by police officers are faced by many other professionals in a variety of fields (Volanti & Aron, 1994). These may include shift work, workplace communication problems, rigid organizational problems, poor working conditions, harassment, and lack of opportunity for advancement (Gershon, Barocas, Canton, Li, & Vlahov, 2009). However, other stressors are specific to policing, such as persistent danger or the responsibility to protect others, and these stressors may exacerbate more common workplace stressors, inducing a multiplicative effect.

Sources of police stress are many, and depend greatly on how the researcher chooses to operationalize police stress. Abdollahi (2002) attempted to categorize the disparate police stress literature to date. She found that most police stress research falls into four categories: interpersonal (personality related stress), occupational stress, organizational stress, and psychological and physical health consequences. These categories will serve as the guide for examining our current understanding of police stress. It is important to clarify that stress in policing is difficult to measure because it is not contributable to only one factor, but many different factors working in concert (Abdollahi, 2002).

Interpersonal stress is the stress generated by the officers' personality itself or from his or her interactions with others. This can be commonly called "police personality" but will be differentiated from the previous discussion of police personality by being known as interpersonal stressors. The concept is that certain traits make police work more difficult for an officer to perform because they experience greater stress than those with different characteristics (Abdollahi, 2002). As previously discussed, interpersonal stressors are linked to the officer's personality characteristics, and thus the objective of the research is to determine if certain characteristics predispose the officers to suffer higher stress than other officers (Black, 2000).

Many different characteristics have been examined such as levels of self-confidence (Krimmel, 1996), optimism/pessimism (Violanti & Aron, 1993) and extraversion/introversion (Hart et al., 1995). Those more confident in their abilities and who hold themselves in high regard experience less stress (Hewitt & Flett, 1991). Officers who have a positive outlook and tend to be hopeful about the future are more optimistic and are more satisfied with their work (Violanti & Aron, 1993). Furthermore optimists tend to remain stable under stress by concentrating on the positive aspects of a situation while pessimists tend to catastrophize, leading to increased feelings of stress and anxiety (Anshel, 2000). Cynicism is prevalent among interpersonal police stress research (Brown & Campbell, 1994). It has been linked to poor relations with the community but also as a coping mechanism for stressful events (Anshel, 2000). While cynicism itself is not stress inducing, the effects of cynicism on community relations will, in the long term, increase the amount of perceived stress the officers experience. Authoritarianism is another well researched aspect of interpersonal police stress. Authoritarianism degrades community relations, which can increase stress levels, and Authoritarian officers tend to be perfectionistic and experience greater frustration during stressful events (Anshel, 2000; Brown & Campbell, 1994).

Another of Abdollahi's (2002) categories is heath consequences of police stress. There have been increasing reports of adverse health outcomes with police officers since the mid-1960s (Gularnick, 1963). This trend continues on into the 21st century (Gershon et al., 2009). Some of the findings are that police have higher rates of cardiovascular disease (Franke, Collins, & Hinz, 1998), digestive disorders (Richard & Fell, 1975), mortality from cancer (Volanti et al., 1986), and suicide rates (Volanti et al., 2009; though see Aamodt, 2008). A few studies have found that the effects of police stressors can cause Posttraumatic Stress Disorder (PTSD) in officers (Robinson et al., 1997). PTSD is a leading contributor to suicide in police officers (Carlier,

Lamberts, & Gersons, 1997). PTSD in police officers can occur after highly traumatic incidents and can result in emotional instability, distorted perceptions of the five senses and an altered state of consciousness. The direction that a police officer's PTSD symptoms take is highly dependent on the interventions that the department engages in for the officer (Carlier et al., 1997). Substance abuse, especially alcohol use, has been examined extensively in the literature and appears to be prevalent in the police culture as a form of coping with occupational and personal stress (Volanti et al., 1985). As perceived stress increases so does alcohol use, on and off duty (Volanti et al.).

While interpersonal stress issues have been implicated in many policing problems (e.g., burnout, poor work performance, etc) the effects of the stress generated by the work itself has also been examined. This area of research is categorized by Abdollahi (2002) as occupational stress. Many researchers agree that policing at times is very stressful and dangerous (e.g., Violanti & Aron, 1995). The life threatening aspects of police work add extra stress that is not present in most other professions. Police officers are often forced to confront aspects of society and human behavior that most others would choose not to confront (Stephens & Long, 2000). The most commonly reported stressors were grouped by Abdollahi (2002) into 6 categories: dealing with the justice system, public scrutiny and media coverage, officer involved shootings, encountering victims of crime and fatalities, community relations, and encountering violent and unpredictable situations.

Officers deal with the criminal justice system on a regular basis and many rate it as a source of stress (Ayes & Flanagan, 1994). Some officers feel that the justice system is too lenient and that their hard work is wasted with plea bargains or when suspects are released due to technicalities (Ayes & Flanagan, 1994). While most of the research supporting this assertion is

dated, it is reasonable to assume that police officers continue to find the justice system a source of stress, as not much has changed in how officers interact with the court system.

Since the 1970s police officers have reported media scrutiny as a source of occupational stress (Kroes et al., 1974). Given the rise of cell phone cameras and media sharing sites where ordinary citizens can record and upload police actions for anyone to see, it is reasonable to expect that stress from public scrutiny has increased since then. Over the past several years, entire movements aimed at public scrutiny of police actions have been spawned by this new ability of ordinary citizens. Previous research examined how media reports damaged police department reputations, which in turn affected the morale of officers (Kroe et al., 1974). However it is unclear how well this research generalizes to the current public scrutiny of police actions which has been brought about, not by media organizations, but by individual citizens. It is likely safe to assume that the morale of police officers in general is affected when their communities turn against them, perhaps even when the community is not the one they serve.

Another area of occupational stress that comes up frequently, and ranks highly in intensity, is officer involved shootings, which include killing someone in the line of duty, a fellow officer being killed or shot, or being shot at by a suspect (Violanti & Aron, 1994). These events can lead to posttraumatic stress disorder and the myriad of other possible issues that are connected to that. The department, again, has the ability to assist the officer to appropriately deal with these events so as to diffuse their long term effects (Anshel, 2000). Connected to the stress of officer involved shootings is another area that is frequently cited by police officers as a source of stress, unpredictable situations (Blau, 1994). Officers are often called to investigate potentially dangerous situations with very little information. The unknown aspect of these situations is

extremely strenuous on officers, as it has been reported that the presence of a known danger is less stressful than the possibility of an unknown danger (Blau, 1994).

Encountering victims of crime also has been identified as a source of stress for police officers (Volanti &Aron, 1994; Kroes et al., 1974). Officers describe great psychological distress when dealing with victims of crime and their families. Studies have found that crimes involving the vulnerable are particularly distressing for officers and can lead to posttraumatic symptoms, feelings of guilt, anxiety or depression (Violanti & Aron, 1994; Kroes et al., 1974). In addition to victims of crime, police officers are often called on to deal with victims of accidents and natural disasters, providing opportunity for more traumatic experiences. Some have theorized that repeated exposure to such traumatic events causes officers to question the "just world" hypothesis, which can cause significant psychological damage (Abdollahi, 2002). However, others have argued that officers do not share the "just world" hypothesis because of the crime victims, violence and injustice they witness on a daily basis, so the damage from these sorts of traumatic events is more limited than it would be for the general population (Brown & Campbell, 1994).

Another source of occupational stress for police officers is community relations (Abdollahi, 2002). According to Violanti and Aron (1994) officers report that when the community has a negative impression of them it makes their job more difficult and they experience more stress as a result. Additionally, "compassion fatigue", defined as the cost of caring for those who suffer (Figley, 1995), can take an emotional toll on the officers as they can feel that they are not appreciated by the communities they serve. This can result in increased cynicism towards the community by the officers (Brown & Campbell, 1994). Community relations as a source of stress is another area where there is a lack of recent research. Given the recent downturn in police-community relations as the result of highly publicized shootings of unarmed minority citizens, it may be that community relations is an even greater source of stress than it was 20 years ago when the majority of this research was conducted. It also may be that police culture has become more insulated as a result of the downturn in community relations and thus the officers are protected from the stress by "the thin blue line." More research is needed to determine how officers are currently facing the increase in scrutiny and negative reactions they receive from the communities they serve.

Organizational stressors are the most frequently cited, and most problematic stressors for police officers (Brooks, & Piquero, 1998). These include many stressors that are inherent to any job, like answering to a superior and maintaining standards of professional conduct, and also stressors that are not unique to policing but also not found in every work situation, like shift work and working with the public (McCreary & Thompson, 2006). It is important to note that while these stressors may not be unique to policing, they play a role in how the officers deal with stressors that are unique to policing and so need to be examined to gain a full understanding of how stress affects policing. Additionally these are the stressors that often are rated very highly and impactful by officers (Stinchcomb, 2004; Kop, Euwema, & Schaufeli, 1999).

Shift work is one of the most commonly cited stressors for officers (Ayres & Flanagan, 1994). Because policing happens 24/7, officers must be on shift at all hours. Some departments have attempted to ameliorate this problem with rotating shifts and shortened work weeks, with four 10 hour days. The outcomes have been mixed (Ayres & Flanagan, 1994). Poor supervision and unfair departmental practices have also been cited as a major source of stress for officers (Ayres & Flanagan, 1994). Being part of an organization that is rigidly hierarchical, with little ability to have input on policies or decisions that affect the officers' daily life, and in some cases

their safety, leaves many officers feeling helpless and stressed (Ayres & Flanagan, 1994). Excessive paperwork, low wages, lack of proper equipment, personnel shortages, and feeling unappreciated from within the department have all been reported as sources of organizational stress (Ayres & Flanagan, 1994). While none of these are unique to policing, they increase the general level of stress that an officer experiences.

Other workplace problems, that is to say troublesome features of the work place (Morash, Haarr, & Kwak, 2006), are implicated in stress for officers. Being the token member of a department, either through gender or ethnicity has shown to increase the level of perceived stress (Morash, Haarr, & Kwak, 2006). Experiencing bias against one's gender or ethnicity has long been recognized as a source of stress in the workplace (Kanter, 1977). However, it may be amplified by the insular nature of the police culture. When the token member feels they are not welcome in the culture, which provides socialization and support for its members' unique experiences, the token member may feel that no one understands them because they are truly alone in their experiences. Female officers have historically reported experiencing more stress than male officers (Morash & Haarr, 1995) and it has been attributed to their minority status as female police officers.

Some organizational stressors combine with unique police stressors to create new stressors. An example is when officers need to fulfill the role of rule enforcer and simultaneously fulfill the role of social worker. This role confusion or ambiguity may induce fear or doubt on the part of the officer, creating more stress (Ayres & Flanagan, 1994). Additionally, department policies may be unclear or contradictory, leaving officers to feel that they will not have support from the department if they make the "wrong" decision, even when the "wrong" decision is not indicated (Brown & Campbell, 1994). Officers often report feeling that departmental objectives conflict with job objectives, leaving the officer to make a choice that may lead to disciplinary or criminal action (Ayres & Flanagan, 1994).

The "typical cop" personality, and those candidates that do well at the police academy, are those with a high need for stimulation, (Carpenter & Raza, 1987). Additionally, officers are typically more socially outgoing than controls (Lorr & Strack, 1994). So it is not surprising that a major finding is that many officers report boredom and isolation as stressors (Ayres & Flanagan, 1994; Kroes et al., 1974). This is typically because officers spend significant portions of time with little to do, engaged in repetitive work, and sitting or standing with little physical activity (Kroes et al., 1974).

The literature indicates that notwithstanding personality (interpersonal) and job specific stressors, organizational stressors are the best predictors of burnout (Burke, 1993). Organizational stressors are rated as more stressful than the dangerousness of the job or the need to work with victims of crime (Storch & Panzarella, 1996). Additionally, organizational stressors are more common, like shift work, paperwork, dealing with inadequate supervision, than more intense and damaging stressors, like officer involved shootings or dealing with the death of a child. The literature appears to indicate that the greater stress is with the smaller, less traumatic, but more common stressors. Another aspect to consider is how well the department is able to assist an officer through a traumatic event, especially if the officer perceives that the department is not behind him in other ways. As discussed previously, how well an officer recovers from a traumatic event is influenced greatly by how the department responds (Carlier et al., 1997). However, the efficacy of any intervention by a department that is already suspect by its officers will be in question and may lead to poor outcomes for its officers that do experience traumatic events. In short, it is likely that for a department to be able to assist an officer through a

traumatic event effectively, it must build trust with the officer previously by assisting in reducing the organizational stress felt by the officer before they experience the traumatic event.

There are some limitations to the police stress literature. There are some questions regarding the methodology used in many studies of police stress. Often police stress is poorly defined and varies from study to study, making it difficult to generalize (Hart, Wearing, & Headley, 1995). The research methodology and direction has been much the same since its inception in the late 1970s, which is exploratory, discipline specific, investigative and lacking in theoretical foundations (Abdollahi, 2002). There has also been a failure to compare police officers to other occupational groups which has caused doubt as to whether policing is more stressful than other occupations (Hart, Wearing, & Headley, 1995). Additionally, the measures that exist to measure stress fail to provide information about the way that personal and occupational factors contribute to overall stress. More concise, theoretically driven research is needed to clarify these issues and determine if indeed police officers are experiencing more stress than other workers and what the relationship is between personal and occupational stressors.

A police officer's personality may play a large role in how they experience and respond to stress. Bolger and Zuckerman (1995) created a framework to understand the basic interaction between stress and personality. According to them, stress can be divided into two stages: stressor exposure and stressor reactivity. They conceptualize stressor exposure as the "extent to which the person is likely to or has experienced a stressful event" (Bolger & Zuckerman, 1995, p.890). They further conceptualize stressor reactivity as the "extent to which a person is likely to show emotional or physical reactions to a stressful event" (Bolger & Zuckerman, 1995, p. 890). Bolger and Zuckerman (1995) posit that personality affects not only a person's reaction to stress (their reactivity), but also their exposure to stress, by playing a role in what types of situations the person puts himself/herself in. This has been hypothesized by others as well, including Smith et. al. (1986) who argued that Type A personalities are at greater risk for coronary disease because of the greater exposure to stress that their personality types led them to as well as greater reactivity when exposed to stressors. In short, personality can play a role in how many stressful situations a person finds themselves in, in addition to how they react to those situations.

Stressor reactivity can be further divided into two subcategories: coping choice and coping effectiveness (Bolger & Zuckerman, 1995). Coping choice is the "coping efforts that a person engages in in response to a stressful event" (Bolger & Zuckerman, 1995, p.891). Coping effectiveness is the "extent to which the person's coping choices actually reduce the negative outcomes of the stressful event" (Bolger & Zuckerman, 1995, p.891). Studies have shown that personality is heavily involved in coping choice (Carver et al., 1993; Stanton & Snyder, 1993). When differential coping choices are used they lead to differential stress outcomes. Personality may also be implicated in the effectiveness of the coping choice, however this has not been extensively examined in the literature (Bolger & Zuckerman, 1995). Work by Miller (1987) does suggest that this is the case though, when they found that different personality types tend to choose certain coping strategies that are optimal for their personality types, which are coping strategies that do not work as well for other personality types (see also Cantor & Norem, 1989).

Neuroticism has been linked to both greater exposure to stressful situations and greater reactivity to the stressful situations (Bolger & Zuckerman, 1995). When the data is examined closely it appears that interpersonal relationships are the most important factor in determining the stress-neuroticism relationship (Bolger & Schilling, 1991). Those high in neuroticism tend to have more interpersonal conflict than those low in neuroticism, and they are more likely to react

in negative ways, including with anger or depression (Bolger & Zuckerman, 1995). Additionally, Bolger and Zuckerman found that those high in neuroticism chose coping strategies that were less effective at removing the negative effects of the stressful event than those low in neuroticism. They also discovered that not all outcomes are governed by the same dynamic, that is that neuroticism seemed to mediate anger and depression, but not anxiety. These differences in how neuroticism effects various emotions may indicate that even personalities with similar characteristics, like being high in neuroticism, may react differently on an individual level to similar stimuli, making it difficult to predict outcomes based on a few measured characteristics. This finding allows for much more variability in coping choices and coping effectiveness, making determining outcomes from personality structure alone very difficult.

The links between personality and stress reactions have been shown many times. The main link appears to be through coping choices (Bolger & Zuckerman, 1995). As discussed above, coping is an action taken to decrease or remove the negative consequence caused by a stressful situation. Coping has been subdivided many times by different researchers, but a commonly used categorical system is "approach/avoidance" (Anshel, 2000) or "emotion-focused" and "problem-focused" (Lazarus & Folkman, 1984). Anshel (2000) defines approach (or problem solving) coping as "strategies that are used to control, to improve understanding, or foster resourcefulness in dealing with the source of stress through thoughts or actions"(p.388). Examples of an approach coping style are obtaining information from a person, communicating feelings, giving verbal or written commands, drawing one's weapon, or admitting error to oneself. Anshel (2000) defines avoidance (or emotion focused) coping as strategies that serve to distract the person from the source of stress. Examples of an avoidance coping style are thoughts that serve to distract from or filter out the source of stress, exercising, avoiding an individual or

location or moving on to the next task. There is some literature to suggest that not just personality influences coping choices, but also a cognitive appraisal of the situation itself (Anshel, 2000). It is then a logical assumption that it would be possible to change how a person copes by teaching them better critical thinking skills, but this hypothesis has yet to be tested in any meaningful way.

Research on coping skills in police officers is relatively scarce; however, some studies have found that officers tend to use emotion focused coping in order to reduce the immediate stress levels being experienced (Richmond et al., 1998). This type of avoidance coping is associated with poor physical and mental well-being (Oretga, Brenner & Leather, 2007). Differences in coping choices in police officers have also been associated with rank, tenure, gender, and age (Evans, Coman & Stanley, 1992). Ortega, Brenner and Leather (2007) found that tenure and personality were significantly correlated with perceived stress and perceived interpersonal conflicts. The latter is of interest for police officers, as much of their job deals with interpersonal interactions. They also found that neuroticism was most highly correlated with perceived stress, confirming the findings of Bolger and Zuckerman (1995) for a specific police population. Furthermore, Ortega, Brenner and Leather (2007) found correlations between neuroticism and feeling tense, feeling worn out, cognitive confusion and feelings of exhaustion. They also found direct links between levels of neuroticism and types of coping strategies employed, in that those officers with higher levels of neuroticism reported more complaining and escape and denial coping choices, while those high in conscientiousness reported utilizing a plan of action as a coping choice more frequently.

Another method that has been used to examine stress, personality and coping in police officers is the Dynamic Equilibrium Theory of stress proposed by Hart (1993). The dynamic

equilibrium theory integrates quality of life and personality variables alongside cognitive relational variables to arrive at the concept that enduring personality characteristics, positive and negative experiences as well as environmental factors and coping choices all interact to determine perceived stress (Anderson et al., 2001). Hart (1995) further theorized that these variables will largely determine the officer's daily work experiences. Hart found that officers report both more and less hassles and uplifts (negative and positive experiences, respectively) when engaged in operational tasks, or actual policing, but also report more overall stress from organizational factors. Furthermore he found that officers experience both satisfaction and stress simultaneously, both in operational and organizational tasks. The officers' overall stress levels were more influenced by organizational factors than other sources of stress. Finally, Hart's (1995) results confirm that neuroticism is associated with increased feelings of stress and emotion focused coping choices, while extraversion is associated with decreased feelings of stress and problem focused coping choices. However, Hart's conclusions differed from previous research in that the officers often used both types of coping strategies simultaneously, which led him to hypothesize that psychological distress and wellbeing are two different, but related, constructs. This theory has yet to be examined in depth. Hart's study suggests a need to look at both the positive and negative aspects of an officer's experience (uplifts and hassles).

Stress is important to examine for policing because it has been linked to many negative outcomes for the officers but also for the public at large. Given the power officers possess and the potential for deadly force, police stress has been examined extensively (Abdollahi, 2002). Personality has been implicated not only in how officers experience stress but also in how they cope with stress (Hart, Wearing, & Headley, 1995). The literature has found a good connection between neuroticism and extraversion and levels of perceived stress (Detrick & Chibnall, 2006) as well as coping choices and their effectiveness (Bolger & Zuckerman, 1995). This research provides a good foundation for examining police stress; however, it also assumes that all police stressors are the same in all jurisdictions.

Rural Policing

Most research examining police personality and police stress has been done using large metropolitan police departments (Brooks & Piquero, 1998). There have been questions raised about the generalizability of these findings to smaller or rural departments (Crank & Caldero, 1991). The questions are based on research that shows differences in behavior between officers from rural departments when compared to officers of large, metropolitan departments (Powell, 1990).

Large departments are typically characterized as being paramilitary organizations where discipline, efficiency and productivity are stressed (Bittner, 1970). Large departments are also thought to have more social distance between the officers and their supervisors, which may make for more difficult relationships and affect both supervisor and officer accountability (Violanti & Aron, 1994). Various researchers have suggested that there is a different emphasis placed on different job roles at a large department versus a rural department, for example more patrol and crime prevention activities in rural departments versus large departments (Brooks & Piquero, 1998). In rural departments it has been found that there is a more informal and relaxed atmosphere between the police department and the community and between the officers and their supervisors (Regoli, Crank, & Culbertson, 1989). If indeed there are differences, as the research has suggested is the case, then generalizing findings from large departments to rural departments becomes problematic.

What is evident in the literature is a lack of research examining the differences between policing in various settings. Most often the studies are completed in dense urban areas, most probably because large departments allow for a large subject pool, and then the findings are assumed to apply to all officers everywhere. There are a lack of studies examining the challenges and stressors of policing in small towns and rural communities. This gap may exist because during the urbanization of the United States (US) in the 1970s and 1980s, rural areas had a decreasing population and the authoritative manuals for city and police management often stated that there was a disappearing difference between urban and rural policing, essentially lumping all police departments together as a homogenous group (Garmire, 1982). However, more than twenty years later more than half of the police departments in the USA employ fewer than 10 sworn officers (Reaves & Hickman, 2002). The lack of attention to rural police departments is demonstrated by the inability to calculate how many departments are in existence in the US (Reaves & Hickman, 2002). The current authoritative work on rural policing in America is by Weisheit, Falcone, and Wells (2005) in which they compare rural policing to urban policing and identify special needs that rural police officers encounter that their urban counterparts do not.

There is not one generally accepted definition of a rural police department. In urban areas the metropolitan police force serves almost all policing needs for the population. The county and state police forces have the same role in processing background checks or running the detention center in urban areas as they do in rural areas (Weisheit, Falcone, & Wells, 2005). Small departments are not the same as rural ones. Over half of departments with fewer than 25 officers are in metropolitan areas (Weisheit, Falcone, & Wells, 2005). In rural areas, state and county police forces have a much larger role. In some areas the county sheriff is the hub of police activity for the county and is responsible for coordination and backup services for many smaller municipal departments (Weisheit, Falcone, & Wells, 2005). Typically the sheriff's office is also responsible for policing unincorporated parts of the county. Additionally, state police have a more active role in police activities and often work together with local and county departments. While federal police services also operate in rural areas on a regular basis, they are not seen as part of the community because they are ultimately responsible to the federal government and have little if any connection to the local citizens (Weisheit, Falcone, & Wells, 2005).

Politics are different in a small town or rural county than in a big city or metropolitan area. Typically, police departments are castigated if they fail to enforce the law in large cities but it may be the opposite in small towns. One small town police chief reported that he was encouraged to stop enforcing DUI laws when the local tavern owners complained to the mayor about their customers being arrested and charged after leaving their places of business (Bass, 1995). Small town police chiefs can find themselves out of a job because they have upset the local citizens for enforcing the law. The sheriff, in most states, has more independence as it is usually an elected office so they are not beholden to the local politicians, but more directly to the citizens (Weisheit, Falcone, & Wells, 2005). Furthermore, rural departments, with limited manpower, spend more time doing administrative tasks, especially sheriff departments. They are still responsible for things like processing court writs or enforcing evictions, like their metropolitan counterparts, but also have general policing responsibilities, like patrolling and peace keeping activities, unlike their counterparts.

Although over half the nation's local police agencies employ 10 or fewer sworn officers, the majority of police research is conducted with large agencies (Brooks & Piquero, 1998), which make up less than 5% of all departments. Additionally almost 90% of all departments have less than 50 officers and serve populations of 25000 or fewer.

Rural police forces have a higher clearance rate, more cases solved, than larger departments according to the Uniform Crime Report (2003) in every category except rape. This discrepancy is especially marked for violent crimes, where rural departments solve 50% more than metro departments. There may be reporting differences that can account for some of this difference but not all of it. For example, rural officers may not write up many minor crimes they encounter, choosing instead to handle it through informal means. However this does not explain the difference in the clearance rate for violent crimes, which are almost surely to be reported (Weisheit, Falcone, & Wells, 2005). This may be attributable to the community size and complexity. The less complex the community, the higher the clearance rate (Cordner, 1989). It makes sense that in less complex communities, where the officers are likely to know the possible suspects and possible witnesses, crimes are more likely to be solved than in more complex communities where the element of familiarity is not present.

Studies have found that style of policing varies according to community size and department size (Weisheit, Falcone, & Wells, 2005). Rural departments are more concerned with crime prevention; medium sized departments are concerned with non-crime services and large departments are concerned with enforcing the law through arrests (Meagher, 1985). The community's desire about how much or little they want their police to do also influences the style of policing. Flanagan (1985) found that rural communities wanted their police to perform a wide array of services while large communities wanted the police to limit themselves to law enforcement. Many rural areas must provide a wide array of services because they are often the only government service available. Other social services may be distant or nonexistent (Weisheit, Falcone, & Wells, 2005). Rural policing involves social services, dispute resolution, rescue service and in some cases firefighting services. Payne (2005) found through an examination of

emergency calls in a rural area that the most frequent calls had to do with animals, intoxicated individuals and interpersonal conflicts. Crime was the fifth most common type of emergency call. This may happen because the community feels closer to the police in a rural area and police report spending much of their time solving problems informally (Meagher, 1985). Payne concluded that rural police have to be more generalist than their urban counterparts. Research has been scant as to why rural officers spend more of their time solving problems informally, but Decker (1979) found that police are viewed as outsiders in urban areas (and indeed many do not live in the city they police) while in rural areas police are part of the community. Decker also found that respect is given to the officer for different reasons based on community size. In the urban areas respect is given to the position of the officer while in rural areas respect is given to the person, who has to prove they deserve the respect before it is given. Rural officers are more integrated into the community because they are more often locals (Weisheit, Falcone, & Wells, 2005).

Rural officers feel that they are more accountable to the community they serve than urban officers (Crank, 1990). The rural officer is held accountable more by the community than by the department while the opposite is true of urban officers, who are held accountable by the department and less so by the community. Rural officers are often considered poor police if they make too many arrests and write too many tickets, as this is a sign they are unable to handle problems informally (Weisheit, Falcone, & Wells, 2005).

Rural departments often have fewer written policies than urban departments (Weisheit, Falcone, & Wells, 2005). This is seen as a result of less complex bureaucracy of the department itself. However, there are negative outcomes to the informal nature of rural departments. Highspeed chases are more common in rural departments than larger ones, sometimes two to three times more common (Weisheit, Falcone, & Wells, 2005), which may be the result of the lack of written policies about police chases. Written policies are slowly being seen as more necessary and are being adopted by more rural departments (Charles, Falcone, & Wells, 1992). One officer summed up the differences in police style between urban and rural as such, "In a small town they are people first and suspects second. In a large town they are suspects first and people second" (Weisheit, Falcone, & Wells, 2005, p. 133).

Categorizing cultural differences is difficult; however several researchers have attempted to find the police cultural differences between urban and rural officers. One cultural difference that has been touched on previously is that rural police officers are much more connected to their communities (Weisheit, Falcone, & Wells, 2005). Because they are more connected, they interact with the public in other roles than just as a law enforcement officer. They buy their groceries from them; get their personal cars fixed at their businesses, and they meet with them at PTA meetings. This connection has been noted by the International Association of Police Chiefs (IACP), which stated that urban police tend to be efficient and rural police tend to be effective (IACP, 1990). Other researchers have found that urban police tend to be more cohesive and unified while rural police tend to be independent and live and work in relative isolation from other officers (Cain, 1971). Rural police officers tend to respond to a larger set of "nonpolice" problems than their urban counterparts. This is not because they are mandated to, but it appears they define police work in a broader sense and it may also be because they know the people that they serve personally (Weisheit, Falcone, & Wells, 2005).

Rural police officers are killed on duty at a relatively high rate, 1.5 times higher than urban officers (FBI, 2003). However they are four times less likely to be assaulted. So it appears that rural officers are less likely, when compared to their urban counterparts, to be assaulted but when they are it more often results in death. With the given data and literature it is not possible to determine why this is the case. It may be because of their isolation that rural officers are not able to get help as quickly as needed, whether it be emergency medical assistance or police backup. Another interesting statistic is that rural police officers are much more likely to shoot and kill an offender than their urban counterparts (Weisheit, Falcone, & Wells, 2005). They are twice as likely to kill as urban police officers and fourteen times more likely than suburban officers. There is no reported explanation for this difference. It can be speculated that responding alone to a variety of potentially dangerous situations leads the officers to feel they are more in danger and resort to lethal force more easily than urban officers, but this explanation has not been investigated.

There have not been any systematic or empirical studies that examine corruption and abuse of power in rural departments. Weisheit, Falcone, and Wells (2005) discussed police corruption and unlawful use of force by rural officers by categorizing police actions as violating the community values or expressing the community values. Police actions that violate the community values are what most people think of when they think of police corruption, such as officers selling drugs, bullying citizens, or beating suspects. These actions, when they are brought to light, are condemned by the community and the officer finds no support. This type of corruption, Weisheit, Falcone, and Wells (2005) estimate, is probably relatively low in rural areas because the officers are so visible to the community and the community complexity is low, making it difficult to keep secrets of this magnitude. In contrast, Weisheit, Falcone, and Wells (2005), estimate that the other type of police corruption, community condoned police actions or actions that express what the community itself values, is likely much higher in rural areas than urban areas. An example of this type of corruption and misconduct is when, during the 1970s,

officers in a small town in Texas were indicted for arresting a black motorist passing through town for no reason and beating him to death when he asked to make a phone call. When the officers were indicted the community rallied around them, paying their bail and raising money for their legal defense (Swindle, 1992). This type of corruption is difficult to foresee because it is not personal in nature on the part of the officer, but part of the community value system. This also makes it difficult to stop. This form of police corruption has largely been ignored by police researchers as well, which may partially be because of the lack of rural police research in general.

Rural police officers and their departments face some unique challenges not faced by their urban counterparts. Many rural departments lack funds, which makes obtaining manpower, training and equipment problematic (Weisheit, Falcone, & Wells, 2005). Rural officers are more likely to find themselves geographically isolated, with backup an hour or more away. At these distances radio communication can become problematic as well. In addition to the geographic isolation, there are not as many other police officers to socialize with. Also many rural officers report being identified as a police officer in the community, even when off duty (Weisheit, Falcone, & Wells, 2005). This prevents them from participating in the community as a community member, as they always have to be an officer. This familiarity allows officers to the community.

What little research exists about stress in small departments, not necessarily rural ones, suggests that small department officers experience less administrative stress, less stress stemming from the criminal justice system, and less stress relating to the public than their large department counterparts (Brooks & Piquero, 1998). This may be because of a less complex

departmental structure, closer ties to the local criminal justice system and a closer relationship with the public in smaller locales served by smaller departments. However, it should be noted that this research was not specific to rural officers and had a small sample size from what was termed "small" departments, making generalization of these findings difficult (Brooks & Piquero, 1998). It can be speculated that increased isolation, low departmental support for traumatic events and 24/7 visibility as a police officer may increase the overall stress of rural and small town police officers. Conversely, a good supervisory relationship, close community ties, and public recognition of their work may decrease their overall stress. In short, more research is needed in order to draw better conclusions.

Urban and rural officers share many of the same concerns and problems. Serious offenses are usually handled in the same way for both departments of both sizes. But for day to day work and lesser offenses, rural officers tend to be less formal, as the police-citizen relationship is different, with different expectation from both the police officers themselves and the community as a whole (Weisheit, Falcone, & Wells, 2005). The current research body does not allow for an adequate comparison of the differences in stress between rural and metropolitan police officers. While there have been many differences in policing activities noted between rural and metropolitan police, primarily in patrol activities, crime prevention and a wider array of services need by the communities in rural areas, there have been only a few studies examining the effect of these differences on the officers. These studies have used far too small a sample size to make any definitive conclusions about stress in rural police officers (Brooks & Piquero, 1998). This area needs more attention from researchers in order to make more accurate and substantial conclusions about rural police officer stress.

Part Time Police Officers

Part time police officers have received no attention from researchers (Weisheit, Falcone, & Wells, 2005). Approximately 1.6% of all police departments nationwide have only part time officers (Reaves & Hickman, 2002) and 5.8% of all sworn officers nationwide are part time employees (Reaves, 2011). Furthermore, part time officers are primarily the concern of small departments, with agencies that have 10 of fewer full time officers employing 50% of the total part time workforce (Reaves, 2011). This makes it especially relevant to small, rural departments.

There is no research to indicate differences between full and part time officers, though differences may exist as there is no research showing that no differences exist either. However, there is research that suggests that part time employees experience more job strain than full time employees do, even when controlling for possible confounding variables (Steffy & Jones, 1990). Additionally, there is research into how full time and part time soldiers handle combat stress (Griffith, 2010). A comparison is possible between the military and police based on their uniform, delivery of protective services to the population, discipline, and rank hierarchy (Lumb, 2016). Studies have found that part time soldiers report higher levels of Posttraumatic Stress Disorder symptoms and suicidal ideation than full time soldiers do after combat deployments (Lane, Hourani, Bray, & Williams, 2012). It has been hypothesized that these negative stress-related outcomes may be due to demographic differences, inferior training, reduced support from the military and its subculture, and inadequate expectations for service (Griffith, 2010).

The generalization from military personnel to police officers is not without limitations, especially for issues related to family stress and separation, which are not a factor in police stress. However, it is believed that a sufficient parallel exists in order for research outcomes

regarding part time soldiers to be able to inform the discussion of possible differences between full and part time police officers. This is an area where more research is needed in order to make any conclusions about part time police experiences as compared to full time officers.

CHAPTER 3

METHOLOGY

Current Study

The literature makes it clear that certain personality traits are preferred over others when examining police officer effectiveness (Roberts, Chernyshenko, Stark, & Goldberg, 2005). It also makes it clear that organizational and operational stress are problematic for officers leading to various negative outcomes (Abdollahi, 2002). Additionally, certain personality traits are better able to handle the stress typically associated with police work (Detrick & Chibnall, 2006). However, given that most police research takes place in large departments, where the working environment, police culture, community relations and even duties required of the officer are, at times, drastically different from rural departments, it is not clear if these desired personality characteristics generalize to rural departments.

The purpose of the current study is to examine what personality characteristics rural officers have as compared to typical police officer personality traits as explored in existing literature, as well as to assess the operational and organizational stressors that rural officers experience daily. Additionally, part time officers will be compared to full time officers to determine if they experience different levels of operational or organizational stress than do full time officers. Part time officers will also be compared to full time officers to examine any personality differences.

Hypotheses

Hypothesis 1: Organizational stressors will be the most highly rated stressors.Hypothesis 2: Neuroticism will be positively associated with levels of perceived stress.

Hypothesis 3: Conscientiousness will be negatively associated with levels of perceived stress.

Hypothesis 4: "Good" rural officers will have higher levels of interpersonal skills, as measured by increased levels of openness and extraversion than is typically found in urban officers.

Hypothesis 5: There will not be any personality differences between part time and full time rural officers.

Hypothesis 6: There will be stress differences between part time and full time officers, with part time officers reporting higher levels of stress. This may partly be due to the part time officers' lack of immersion in the police culture as a defense and coping mechanism.

Participants

Participants were 131 full time officers and 1 part time officer from 25 rural police departments in Pennsylvania (n=50), Minnesota (n=10), Wisconsin (n=61), Idaho (n=10), and South Dakota (n=1). The mean number of officers per department was 13.3. Each police department served an area that is defined as rural by one of the existing federal definitions. This was operationalized by only including departments that serve a population of 50,000 or less people, as this is the US Census definition of a metropolitan area, with all areas of smaller populations being considered rural (Census Bureau, 2010). Each participant was a sworn law enforcement officer in their state of service. The study used a non-random sampling method to access rural police officers. The departments were chosen based on proximity to the researchers' homes and referrals from already participating departments. Several departments were chosen for their proximity to the interstate. The sample consisted of 118 men (89.4%) and 14 women (10.6%). The average age was 40.97 years, with officers aging from 23 to 66 years old. One hundred and five participants (79.5%) were married, 13 (9.5%) were divorced, 12 (9.1%) were single and 2 (1.5%) were separated. The vast majority (127, 96.2%) identified as Caucasian, with 3 (2.3%) identifying as Asian/pacific Islander, 1 (.8%) identifying as African American and 1 (.8%) identifying as Hispanic.

Seventy (53%) participants identified as patrol officers, 19 (14.4%) as corporals or sergeants, 12 (9.1%) as detectives, 7 (5.3%) as lieutenants, 5 (3.8%) as captains or assistant chiefs, and 19 (14.4%) as police chiefs. The participants in the sample had an average number of years as a sworn police officer of 16.4 years with a standard deviation of 10.3 years. The average number of years the participants were members of their current department was 13 years with a standard deviation of 9.3 years. The participant with the least experience had 1.5 years of experience while the officer with the most had 43 years of experience. All demographic information can be found in Table 1.

Design

The study design is non-experimental, examining the relationships between personality and perceptions of work-related and overall stress. It is an exploratory study utilizing self-report measures to gather data.

Procedure

Departments were selected via telephone, in-person solicitation and email. The chiefs of the participating departments forwarded a link to the survey to their officers to participate on a voluntary basis. To eliminate any potential for influence, the commanding officers did not have access at any time to any study information regarding any officers. Whether or not a department participated was the purview of the police chief. Twenty-five of 43 (58%) departments that were contacted agreed to participate in the study. This has been an accepted method of gathering data in previous police stress studies as almost all officers participate from a given department reducing the need to be concerned with representative bias (Sanders, 2008; Morash, Haarr, & Kwak, 2006). The survey was offered to approximately 572 full and part time officers, with 132 completing the full survey, resulting in a response rate of 23%. However, only 1 part time officer completed the survey of the 51 that were offered participation.

Informed consent was obtained from each participant explaining the purpose of the study, possible risks and how their privacy would be protected. The responses were recorded confidentially and at no time did anyone other than the authors have access to the recorded answers. Each participant completed a demographic survey, a Big Five personality measure, a general stress questionnaire, and operational as well as organization police stress measures. These self-report measures were administered in an online survey using Qualitrics. Each participant took the survey in the same order. No counterbalancing was utilized. To encourage participation, each participant was entered into a drawing to win one of five \$100 Amazon gift cards, which were raffled off when the study closed.

The participants spent a wide array of time completing the survey. The median time to complete the survey was approximately 10 minutes. Approximately 10% of the sample finished the survey in less than 7 minutes. These responses were likely not as thoughtful or meaningful as those that took longer to respond. Only one participant completed the survey in less than 5 minutes. There were 15 incomplete surveys which were removed from the dataset.

Measures

Demographic Questionnaire

General demographic questions were given, including: age, gender, ethnicity, marital status, number of years as a sworn police officer, number of years with the current department, and full or part time employment status. This demographic questionnaire can be found in Appendix A and the demographic data can be found in Table 1.

The Big Five

The Big Five Inventory (BFI) is a 44-question short self-report measure designed by John, Donahue, and Kentle (1991). It has been used many times previously (John, Naumann, & Soto, 2008) and uses shorter phrases and fewer questions than other measures. This measure was chosen for its brevity while still maintaining psychometric rigor. It has a test retest reliability of .84, a mean intercorrelation of .81 between the domains, and is highly correlated (r = .78) to the NEO Personality Inventory- Revised, which is the primary measure of the Big Five (Rammstedt & John, 2007). The BFI scoring is achieved by summing 8-10 questions for each personality construct and averaging the answers, with higher scores indicating more of the trait (John & Srivistava, 1999). See Appendix B for this measure.

Perceived Stress Scale

The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) is one of the most widely used nonspecific stress measures (Lee, 2012). It is a well-researched measure with good psychometric properties (Taylor, 2015). It has a Cronbach alpha ranging between .80-.90 and an intraclass correlation coefficient of greater than .70 (Lee, 2012). It consists of 10 items, with several being reverse coded. The measure is scored by summing the rated questions, with a

high score indicating more stress (Cohen, Kamarck, & Mermelstein, 1983). It can be found in Appendix C.

Operational Police Stress Questionnaire

The Operational Police Stress Questionnaire (PSQ-OP; McCreary & Thompson, 2006) consists of 20 items that cover a range of aspects of being a police officer. It has high reliability with a Cronbach's alpha of .93 and well demonstrated validity having been pilot tested on several different police populations (McCreary & Thompson, 2006) as well as having been normed on a large, mixed police population (McCreary, Fong, & Groll, 2017). Additionally, it is positively correlated with other general stress measures suggesting that it is capturing the same general stress domain while being specific to operational stress (McCreary & Thompson, 2006). Scoring consists of averaging the 20 items, with a higher score indicating higher perceived stress. It can be found in Appendix D.

Organizational Police Stress Questionnaire

The Organizational Police Stress Questionnaire (PSQ-Org; McCreary & Thompson, 2006) assesses the perceived stress from organizational factors. The measure consists of 20 items that cover a range of organizational aspects to police work. It has high reliability with a Cronbach's alpha of .92 and underwent the same validation procedure of the PSY-Op questionnaire (McCreary & Thompson, 2006) as well as having been normed on a large, mixed police population (McCreary, Fong, & Groll, 2017). It is also highly correlated with other stress measures (McCreary & Thompson, 2006). These two stress questionnaires were chosen because of the ability to examine operational stress separate from organizational stress, something that the literature indicates is useful as they appear to be two separate stress constructs for officers, having different sources and potentially different outcomes. Both police stress measures were normed on a Canadian Provincial Police force that served a mix of urban, suburban and rural areas. This measure can be found in Appendix E.

CHAPTER 4

RESULTS

Personality

Descriptive statistics for the Big Five Inventory measure are presented in Table 2. A series of one sample t-tests were conducted to determine if there were differences in personality between this rural police officer sample and the normed sample for the BFI. Conscientiousness scores were the highest (M= 4.18) and ranged from 1.22 to 5. These results were significantly different from the BFI normative sample (M=3.72) (t(131) = 9.47, p < .001) with a large effect size (d = .82) indicating that the officers in the sample were considerably higher in conscientiousness than the normative sample. Additionally, officers scored highly on Extraversion, with a mean of 3.59 and a range of 1.75 to 5. These results were significantly different from the BFI normative sample (M=3.25) (t(131) = 5.27, p < .001) with a moderate effect size (d = .46) indicating that the officers had somewhat elevated extraversion traits as compared to the normative sample. The results on the BFI Agreeableness scale were not elevated over the normative sample, both with a mean of 3.82. These results indicate that the officers were in the average range for agreeableness. The officers scored quite low on the BFI neuroticism scale, with a mean of 2.42 and a range of scores from 1.13 to 4.63. These results are significantly different from the normative sample (M=3.13) (t(131) = -12.06, p < .001) with a very large effect size (d = -1.05), indicating that the officers were far less neurotic, and by contrast more emotionally stable, than the general population. Additionally, the officers scored low on the BFI Openness scale, with a mean of 3.4 and a range of scores from 2.1 to 4.8. These results are significantly different from the normative sample (M=3.9) (t(131) = -10.81, p < .001)with a large effect size (d = -.94) indicating that the officers were considerably less open to new

experiences than the general population. See Table 6 for a Pearson correlation analysis of the big five factors and the stress measures.

Perceived Overall Stress and Personality

On the Perceived Stress Scale (PSS), the officers scored 12.67 out of a maximum score of 40. Their scores ranged from 1 to 29. See Table 3 for descriptive statistics associated with this scale. Officers' scores were compared to the normed data through a series of one-sample t-tests. The average amount of perceived stress reported by officers (M = 12.67) was not significantly different from the normative sample (M = 12.1) (t(131) = 1.10, p = .274), indicating that the officers are experiencing a normal amount of perceived stress in their overall lives.

A Pearson correlation analysis found that extraversion (r(130) = -.244, p = .005), agreeableness (r(130) = -.238, p = .006), conscientiousness (r(130) = -.341, p < .001), and neuroticism (r(130) = .626, p < .001) were significantly correlated with the PSS. A multiple linear regression was calculated to predict PSS scores based on the Big Five scale scores and demographic variables including age, gender, years as a sworn officer, years with the department, and position within the department. A significant regression equation was found (F(10,121) 9.07, MSE = 21.76, p < .001) with an R^2 of .428. Neuroticism ($\beta = 5.51$, SE = .796, p< .001) and openness ($\beta = 1.76$, SE = .843, p = .038) were the only significant predictors. These results suggest that officers' PSS scores increase 5.51 points for every one point increase on neuroticism and they increase 1.76 points for every one point increase in openness.

Operational Police Stress

An error in creating the online survey resulted in one missing item from the Operational Police Stress Questionnaire (PSQ-OP). The question, "Negative comments from the public", was omitted and the question "upholding a higher image" was asked twice. (Note: All participants answered the repeat question in the exact same way, suggesting that the participants were answering honestly or at the very least were attending to the questionnaire.) Due to this error, a new normative mean was calculated, using only the normative data from the 19 questions included in the survey. Descriptive statistics for the Operational Police Stress Questionnaire, including the calculated mean norm, can be found in Table 3.

McCreary, Fong, and Groll (2017) give cut off scores for low, moderate and high stress for the PSQ-Op at below 2.0, 2.1-3.4, and above 3.5, respectively. The officers' overall mean score (M = 3.15) indicates they experience a moderate level of stress related to operational aspects of policing. An item level analysis can be found in Table 4. The sample officers reported "Fatigue," "Finding time to stay in good physical condition," "Not enough time to spend with family and friends," "Paperwork," and "Shift work" as the top five rated stressors. This differs from the normative sample somewhat. The normative sample reported "Occupation related health issues" as the fourth most stressful. When examined with a series of one-sample t-tests against the normative sample, only three questions were significantly different, and they were all of small effect size (d = .17-.25) (see Table 4). On all other items, the officers' scores were not significantly different from the normative police sample.

Operational Police Stress and Personality

As seen in Table 6, a Pearson correlation analysis was performed between the big five factors and the stress measures. Regarding the Police Stress Questionnaire – Operational (PSQ-Op), only neuroticism (r(130) = .332, p < .001) and agreeableness (r(130) = -.187, p = .032) were significantly correlated. A multiple linear regression was calculated to predict PSQ-Op scores based on the Big Five scale scores and demographic variables including age, gender, years as a sworn officer, years with the department, and position within the department. A significant

regression equation was found (F(10,121) 2.63, MSE = .988, p = .006) with an R^2 of .179. Neuroticism was the only factor that was significant ($\beta = .653$, SE = .170, p < .001). These results suggest that officers' scores increase .653 points for every one point increase in neuroticism. It is worth noting that conscientiousness ($\beta = .354$, SE = .200, p = .079) and openness ($\beta = .321$, SE = .179, p = .077) approached significance. No other personality and demographic factors were found to be predictive of PSQ-Op scores.

Organizational Police Stress

The officers' overall score on the Organizational Police Stress Questionnaire (PSQ-Org) (M = 3.12) was significantly different from the normative mean of 3.53 (t(127) = -3.80, p < .001). The cut off scores for low, moderate and high stress levels given by McCreary, Fong, and Groll (2017) are: below 2.6, 2.7-3.9, and above 4.0, respectively. The officers overall scored in the moderate stress range. However, their scores were significantly lower than the normative sample, with a small to medium effect size (Cohen's d = -.34).

An item level analysis, found in Table 5, identified "staff shortages," "bureaucratic red tape," "inconsistent leadership," "feeling like you always have to prove yourself to the organization," and "dealing with coworkers" as the top five organizational stressors. This differs from the normative sample in several important ways. The normative sample ranked "bureaucratic red tape" as the primary stressor and "feeling that different rules apply to different people" was ranked at the fourth highest stressor. These differences in organizational stress were further demonstrated through a series of one-sample t-tests in which significant differences on 14 items were shown (see Table 5). The rural sample scored lower than the normative sample on all items.

Organizational Police Stress and Personality

The Pearson correlation analysis found that only agreeableness (r(126) = -.224, p = .011)and neuroticism (r(126) = .279, p = .001) were significantly correlated with PSQ-Org, as seen in Table 6. A multiple linear regression was calculated to predict PSQ-Org scores based on the Big Five scale scores and demographic variables including age, gender, years as a sworn officer, years with the department, and position within the department. A significant regression equation was found (F(10,117) 2.71, MSE = 1.34, p = .005) with an R^2 of .188. Neuroticism ($\beta = .658$, SE = .198, p = .001), agreeableness ($\beta = -.427$, SE = .214, p = .048), conscientiousness ($\beta = .563$, SE= .236, p = .019), and openness ($\beta = .461$, SE = .210, p = .030) were significant predictors of PSQ-Org scores. These results can be interpreted as the following: for every one point increase on neuroticism, officers' scores increase by .658 points, for every one point increase on agreeableness officers' scores lowered .427 points, for every one increase on conscientiousness, officers' scores increased by .563 points, for every one increase in openness, officers' scores increased by .461 points. Extraversion and demographic variables were not found to be significant predictors of PSQ-Org scores. To further examine how the different big five personality factors influence PSQ-Org scores, a multiple linear regression model was calculated based on just the big five factors, with neuroticism removed, given neuroticism's large impact on the regression model. A significant regression equation was found F(4,123) 3.16, MSE = 1.42, p = .016) with an R^2 of .093. Agreeableness (β = -.628, SE = .211, p = .004) and openness (β = .447, SE = .211, p = .036) were found to be significant predictors with neuroticism removed. This suggests that with neuroticism removed, for every one point increase in agreeableness, officers' score lowered by .628 points and for every one point increase in openness, officers' scores increased by .447 points.

Operational Police Stress Versus Organizational Police Stress

When PSQ-Org scores were compared to PSQ-Op scores it was found that the officer sample reported equal operational stress (M = 3.15) and organizational stress (M = 3.12), contrary to hypothesis 1. A paired sample t-test revealed that there was no significant difference between the two stress measures (t(127) = .491, p = .624).

As demonstrated in Table 6, hypothesis two was supported, and furthermore neuroticism was a significant predictor for all stress measures. Hypothesis 3 was supported but only with general stress, again as demonstrated in Table 6.

Hypothesis 4 examined the personality predictors of officer performance, as assessed by police chiefs. Due to concerns about confidentiality and difficulty recruiting participants, however, the performance assessment aspect of the study was eliminated prior to data collection. Thus hypothesis 4 was untestable.

Hypotheses 5 and 6 examined differences in stressors between full and part-time officers. The number of participating part-time officers (n = 1) was such that comparisons were impossible. Consequently, Hypotheses 5 and 6 remain untested.

Table 1

Demographic Data				
Characteristics	Mean	SD	%	n
Male			89.4%	118
Female			10.6%	14
Caucasian			96.2%	127
Asian/Pacific Islander			2.3%	3
African American			.8%	1
Hispanic			.8%	1
Patrol			53%	70
Corporal/Sergeant			14.4%	19
Detective			9.1%	12
Lieutenant			5.3%	7
Captain/Assistant Chief			3.8%	5
Chief			14.4%	19
Age	40.97	10.1		132
Years as a sworn officer	16.4	10.3		132
	- 0			

Years with the current department	13	9.3		132
Single			9.1%	12
Married			79.5%	105
Divorced			9.8%	13
Separated			1.5%	2

Table 2

Big Five Comparison

Big Five Domain	Mean	SD	Norm mean	Norm SD	Significance	Effect Size
Conscientiousness	4.18	.55	3.72	.71	<i>p</i> <.001	<i>d</i> = .82
Extraversion	3.59	.74	3.25	.9	<i>p</i> <.001	d = .46
Agreeableness	3.82	.59	3.82	.68	<i>p</i> =.946	<i>d</i> =01
Neuroticism	2.42	.67	3.13	.86	<i>p</i> <.001	d = -1.1
Openness	3.4	.54	3.9	.69	<i>p</i> <.001	<i>d</i> =94

Table 3

Stress Measure Comparison

Stress Measure	Mean	SD	Norm Mean	Norm SD	Significance	Effect
						Size
Perceived Stress Scale	12.67	5.93	12.1	5.9	p=.274	d = .10
Operational Police Stress	3.15	1.06	3.25*	1.76*	p=.339	d =08
Organizational Police Stress	3.12	1.23	3.53	1.57	p<.001	<i>d</i> =34
	1.075	1	1 1 11 0			

*Note. A new normative mean and SD were calculated to adjust for a missing question.

Table 4

Operational	l Police Stress	Scale Item	Comparison
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Operational Police Stress Scale Item Comparison								
Scale Item	Mean	SD	Norm Mean	Norm SD	Significance	Effect size		
Shift Work	3.52	1.72	3.78	1.90	<i>p</i> =.079	<i>d</i> =15		
Working alone at night	2.53	1.75	2.68	1.80	<i>p</i> =.327	d=09		
Overtime demands	2.73	1.71	3.03	1.79	<i>p</i> =.049	<i>d</i> =17		
Risk of being Injured on the Job	2.73	1.44	2.76	1.66	<i>p</i> =.841	<i>d</i> =02		
Work related activities on time off	3.27	1.72	3.26	1.82	<i>p</i> =.973	<i>d</i> =.00		
Traumatic Events	3.04	1.67	3.17	1.77	<i>p</i> =.366	d =08		
Managing social life outside of work	2.81	1.52	2.87	1.55	<i>p</i> =.654	<i>d</i> =04		
Not enough time to								
spend with family and friend	3.74	1.71	3.66	1.76	<i>p</i> =.580	<i>d</i> =.05		
Paperwork	3.60	1.54	3.66	1.85	p = .648	<i>d</i> =04		
Eating healthy at work	3.52	1.69	3.47	1.74	p = .760	<i>d</i> =.03		
Finding time to stay in good physical condition	3.89	1.76	3.81	1.65	<i>p</i> =.613	<i>d</i> =.04		
Fatigue	3.92	1.70	4.16	1.80	<i>p</i> =.114	<i>d</i> =14		
Occupation related health issues	3.28	1.86	3.74	1.91	<i>p</i> =.005	<i>d</i> =25		
Lack of understanding	2.84	1.85	3.04	1.75	<i>p</i> =.218	<i>d</i> =11		

from family or friends about work						
Making friends outside the job	3.42	1.70	2.57	1.67	<i>p</i> =.302	<i>d</i> =09
Upholding a higher image in public	2.91	1.87	2.94	1.81	<i>p</i> =.850	<i>d</i> =02
Negative comments from the public	N/A	N/A				
Limitations to your social life	2.71	1.67	2.91	1.70	<i>p</i> =.174	<i>d</i> =12
Feeling like you are always on the job	3.48	1.75	3.31	1.82	<i>p</i> =.275	<i>d</i> =.10
Friends/family feel the effects of stigma associated with the job	3.15	1.64	2.82	1.72	<i>p</i> =.025	<i>d</i> =.20

Table 5

Organizational Police Stress Scale Item Comparison

Scale Item	Mean	SD	Norm Mean	Norm SD	Significance	Effect Size
Dealing with coworkers	3.55	1.47	3.37	1.65	<i>p</i> =.172	<i>d</i> =.12
Feeling that different						
rules apply to different	3.48	1.97	4.12	1.95	p<.001	<i>d</i> =32
people						
Feeling like you always						
nave to prove yourself to	3.67	2.05	3.87	1.94	<i>p</i> =.350	<i>d</i> =08
he organization						
Excessive administrative	3.39	1.77	3.74	1.88	p=.023	<i>d</i> =20
luties	0107	1177	0171	1.00	P 1020	u 120
Constant changes in	3.22	1.82	3.77	1.87	p = .001	<i>d</i> =30
policy/legislation					1	u 100
Staff Shortages	4.16	2.03	4.21	1.93	p = .0	
Bureaucratic red tape	3.98	1.98	4.32	1.90	<i>p</i> =.048	<i>d</i> =17
Foo much computer	2.74	1.63	3.55	1.89	<i>p</i> <.001	<i>d</i> =49
work					1	
Lack of training on new	2.30	1.51	3.10	1.79	<i>p</i> <.001	<i>d</i> =53
equipment					-	
Perceived pressure to volunteer free time	2.25	1.62	2.94	1.88	<i>p</i> <.001	<i>d</i> =42
Dealing with	3.33	1.90	3.34	1.83	<i>p</i> =.932	<i>d</i> =01
Supervisors nconsistent leadership						
style	3.71	2.13	4.13	2.01	<i>p</i> =.026	d=20
Lack of resources	3.14	1.90	3.51	1.85	p=.029	<i>d</i> =19
Unequal sharing of work					<i>p</i> =.029	
responsibilities	3.32	1.96	3.60	1.93	<i>p</i> =.105	<i>d</i> =14
When sick or injured						
coworkers appear to look	2.34	1.57	2.73	1.95	p = .006	<i>d</i> =24
down on you	<i>∠.J</i> -т	1.57	2.15	1.75	<i>P</i> =.000	u= .27

Leaders overemphasize the negatives	3.02	1.99	3.50	2.02	<i>p</i> =.006	<i>d</i> =24
Internal investigations	2.53	1.85	3.20	2.07	<i>p</i> <.001	<i>d</i> =36
Dealing with the court system	3.38	1.89	3.54	1.93	<i>p</i> =.328	<i>d</i> =09
The need to be accountable for doing your job	2.74	1.67	3.20	1.90	<i>p</i> =.002	<i>d</i> =28
Inadequate equipment	2.34	1.76	2.85	1.78	<i>p</i> =.001	<i>d</i> =29

Table 6

Pearson Correlations Between the Big Five Factors and the Stress Measures

Measure	Extraversion	Conscientiousness	Agreeableness	Neuroticism	Openness
PSS	244**	341**	238**	.626**	.011
PSQ-Op	067	068	187*	.332**	.087
PSQ-Org	069	015	224*	.279*	.119

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

CHAPTER 5

DISCUSSION

Discussion

While the hypotheses regarding part time officers (5 and 6) were unable to be tested due to sample limitations and hypothesis 4, related to police officer performance, was untestable due to changes in the data collected, the other hypotheses were able to be tested adequately. Hypothesis 1, which proposed that organizational stressors would be the most highly rated stressor, was not supported, with scores on the PSQ-Org and the PSQ-Op being equal. Hypothesis 2, which proposed that neuroticism would be positively associated with levels of perceived stress, was supported on all stress measures to a significant level. Hypothesis 3, which proposed that conscientiousness would be negatively associated with levels of perceived stress, was weakly supported.

The results of the PSS cast doubt on policing as a uniquely stressful occupation, at least for rural officers, as has been suggested by many (Pienaar, Rothermann, & Van De Vijver, 2007). The officers reported their general stress levels, which would incorporate occupational stress, as being average. In previous research (Violanti & Aron, 1995) the lack of adequate comparative research between police occupational stress and that of other occupations has been noted. However, even with the lack of comparative research, the general assumption is that police work is generally more stressful. This assumption appears to need to be revisited. While there is research to support negative stress related outcomes connected to police work (Anshel, 2000; Kerley, 2005), more research is needed to determine how those outcomes are related to occupational police stress and police officer perceived stress in general. This author was unable to locate any literature to directly support that police officers report greater levels of general stress than the general population. The dearth of literature is surprising given the many claims that policing is a stressful occupation (Violanti, Marshall & Howe, 1985). It appears that more research is needed to determine if, in fact, police officers perceive more occupational stress than the general population. Given the sample characteristics, being rural police officers, it is possible that urban or suburban officers experience greater levels of overall stress as compared to the general population and rural officers just experience less stress as compared to their counterparts, but further research is needed to verify this.

Many studies previously claimed administrative or organizational stress is the most problematic type of perceived stress (Brooks & Piquero, 1998; Gershon et al., 2009). It is often ranked as the highest and most stressful (Collins & Gibbs, 2003). Indeed, McCreary, Fong, and Groll, (2017) found that the normative sample of police officers ranked organizational stress higher than operational stress. The current study results indicate that rural officers experience significantly less organizational stress, the most stressful of occupational stress. While the officers of the sample reported PSQ-Org scores in the moderate stress range, they were lower than the normative sample on 14 of 20 items with effect sizes, measured in Cohen's d, ranging from .17 to .53. This indicates that, regarding organizational stress, rural departments produce less organizational stress as compared to their urban and suburban counterparts. While the mechanism for this decreased level of organizational stress is unknown, it is possible that the nature of the smaller, and possibly less bureaucratic, departments that are prevalent in this sample are the reason for this difference. For example, internal investigations or feeling that different rules apply to different people may not engender much stress if the department consists of five officers and they are on friendly terms with each other. The biggest differences centered on police equipment. It is unclear if these differences are powered by more access to adequate

equipment or the feeling that they "make do" with what their more limited budgets allow. The results suggest that further study into the specific reasons why rural officers report experiencing less organizational stress would be beneficial, especially given the outsized impact that organizational stress has shown in previous studies (Collins and Gibbs, 2003). This line of research may lead to innovative methods of helping urban and suburban departments enact policies to help their officers reduce their perceived organizational stress and, by proxy, reduce the negative outcomes associated with increased police occupational stress (Andersen, Papazoglou, Arnetz, & Collins, 2015).

These results suggest that police work is police work, no matter the context or population. The lack of difference in operational stress levels between the study sample and the normative sample may indicate that operational police work, outside of organizational stressors, is largely the same, and that officers view it with equal stressfulness, regardless of their setting. The one question where the study sample scored higher than the normative sample, "Friends/family feel the effects of stigma associated with the job", may indicate an area of where rural officers experience more stress than officers in other settings. The increase in stigma an officer might feel in a rural community versus an urban or suburban one is logical. In a rural setting the officer and their family are more accessible and known to the population as a whole, while in an urban or suburban setting their families may be able to better blend in. Finally, the similarities in results, given the differences in setting and population served between the normative sample and the study sample, suggest that the PSQ-Op captures a specific and well-defined set of police occupational stressors. Research suggests that rural police work is markedly different from police work in other communities (Weisheit, Falcone & Wells, 2005) and the fact that the study sample and the normative sample rated operational stress the same lends evidence that PSQ-Op

is measuring a distinct and relevant domain of perceived police occupational stress. This is further evidence of the validity of the PSQ-Op as a measure of operational police stress.

The personality findings of this study are much in line with previous research. Neuroticism was low, as would be expected in a restricted sample given the pre-employment psychological testing. This, in itself, is evidence that the pre-employment screening is at least somewhat successful at reducing the number of officers with emotional instability, given that approximately 5% are rejected based on psychological screening (Cochrane, Tett, & Vandecreek, 2003). Only 12.1% of the sample reported neurotic tendencies at or above the normative mean of 3.13. Given that neuroticism was the most predictive personality measure on all measures of stress, it would behoove police departments and screening psychologists to continue to work towards weeding out those with even normative levels of neuroticism. The overall findings that neuroticism is the most influential predictor of stress are in line with findings from suburban and urban departments (Sanders, 2008; Detrick & Chibnall, 2006). Also of note is that the same pattern of big five traits was evident in this sample as has been found in previous research, namely high conscientiousness and extraversion, low neuroticism and openness (Sanders, 2008).

While the other four big five personality factors were not predictive of either general perceived stress or operational stress, three of them (agreeableness, conscientiousness, and openness) were predicative of organizational stress. It is noteworthy that conscientiousness has been identified as an important predictive factor for police performance (Black, 2000; Cortina et. al., 1992) but was only marginally predicative in this study, and only of organizational stress. This may suggest that conscientiousness has a more complicated relationship with stress and performance than previously suggested. It is, however, important to note that those low in conscientiousness would have a difficult time succeeding in police work in general. Given the

mean time as police officer of this sample was over 16 years, it is likely that those low in conscientiousness would have been removed from police work early in their careers. This differs somewhat from neuroticism, in that officers may be able to avoid situations that increase stress due to neurotic tendency, but would have a harder time avoiding tasks that require greater levels of conscientiousness.

Several factors underscore the importance of agreeableness in helping to reduce officers' perceived organizational stress: the high correlation between agreeableness and the PSQ-Org, and the regression model showing that when neuroticism is removed, agreeableness becomes the most predictive factor. Agreeableness may be an more important factor in small departments, due to the tighter social landscape. Agreeableness has not previously emerged as a consistent source of interest in police personality research (Detrick & Chibnall, 2006) and one researcher (Black, 2000) found that it was unrelated to police training performance. Conscientiousness and neuroticism have been the primary predictive big five traits identified in the literature, especially for overall police performance (Cotina, 1992; Barrick & Mount, 1991). These findings suggest that personality and perceived organizational police stress may have a more nuanced relationship than previously identified. These results suggest that screening in for higher levels of agreeableness, specifically, and to a lesser extent conscientiousness and openness, would result in officers who perceive lower levels of organizational stress.

Clinical Implications

In an endeavor to help departments make hiring decisions that put the most stable and effective officers on the job, departments and screening psychologists should look to not only neuroticism, as has been pointed out in previous research (Cortina, 1992), but also agreeableness. The current study's findings indicate that agreeableness plays a role in an officer's ability to

perceive less organizational stress, which is often rated as the most stressful aspect of the job. Research indicates that the majority of police officer employment screenings rely on the MMPI-2 (71.6%) with a smaller number using the CPI (24.5%) (Cochrane, Tett, & Vandecreek, 2003). While it is possible to derive a big five trait index from these psychological measures (see Cortina et al., 1992), it is more accurate and feasible to use a measure specifically designed to gauge big five traits, for example the NEO-PI-R or the BFI. The MMPI-2 appears to be used in a "screen out" approach, as its purpose is to identify psychopathology. This approach is useful in reducing neuroticism, which has likely resulted in a current officer population that experiences less stress in their roles than the general population would. However, in order to more fully choose officers that perceive less organizational stress, psychologists need to use tools to "select in" agreeableness and, to a lesser extent, conscientiousness and openness. In short, these results suggest that a "select in" method of pre-employment psychological screening that increases the characteristics associated with lower organizational stress levels would result in officers who experience less organizational stress. It is important to note that high levels of agreeableness may result in increased stress, so agreeableness must be balanced with the other desirable personality domains.

Policy Implications

These results suggest that officers working in small departments set in rural locations experience less organizational stress. Given the high impact of organizational stress, it would benefit departments in urban and suburban areas to learn from their rural counterparts in order enact policies to help reduce the organizational stress levels. A major area where the officers in this study reported lower stress levels was related to equipment. It is possible that rural departments, with smaller budgets, have fewer pieces of new equipment that require training.

However, rural departments are typically more effective at crime prevention and crime solving (Weisheit, Falcone & Wells, 2005) so the question should be asked as to whether the benefits related to newer (or perhaps more) equipment is worth the stress that it appears to engender. Further research is needed.

It is possible that much of the reduction in organizational stress perceived by rural officers is inherent to the smaller, and likely less bureaucratic, departments. While this is not replicable in larger departments, it may be possible to structure precincts and similar organizational units to mimic the reduced bureaucracy of rural departments. Again, further research is needed in order to explore possible organizational changes that may reduce the perceived stress among urban and suburban departments.

Limitations

The error in creating the online survey limits the utility of this study to be compared to other police officer samples using the PSQ-Op. This is a considerable limitation in the generalizability of the study results. Additionally, the sample was a non-random, largely convenience sample, based on geographic proximity to the researchers homes and travel routes. Even though the sample is regionally diverse, it is far from randomized. The sampling method contributes to limited generalizability. The sample self-selected, which may have reduced the variability of those that chose to participate. A possible limitation may be that those that experience less stress overall have the time, desire and energy to participate. Also, the lack of counterbalancing could have resulting in skewed data, especially in the measures towards the end of the survey. It is possible that the lack of counterbalancing may have contributed to the reduced organizational stress the sample reported.

The sample failed to reach enough part time officers to be able to test any hypotheses involving that subpopulation. This is a population that is missing from the literature, and its absence from this study is a further limitation. Additionally, the sample lacked diversity in gender, ethnicity and marital status. The most recent demographic information reported that 78% of the population of rural America is white, non-Hispanic (Council, 2012), far lower than the samples 96%. This homogeneity of the sample limits is generalizability, especially as ethnicity and gender have previous been identified as sources of increased stress (Morash, Haarr & Kwak, 2006; Morash & Harr, 1995). Several of the organizational stress questions (for example "Feeling that different rules apply to different people") may likely be rated much higher by a more diverse sample.

The difficulty in obtaining performance data reduced the conclusions that were able to be responsibly drawn regarding the effect of perceived stress and personality. Knowledge of the interrelationship of stress and personality is important, but ultimately their connection to police performance would provide concrete data for departments to be able to enact policies to help officers perform better.

This study looked to compare performance of rural officers to published data regarding urban and suburban officers. While this hypothesis was ultimately untestable due to data limitations, the lack of a comparison sample would have been a limitation, as other studies would have had different collection methods, different analysis methods and likely different performance evaluation instruments.

Future Research

The implications of this study for future research are many. The results suggest that there is connection between police organizational stress and agreeableness. This connection needs to

be further explored in order to determine how it can be used better in police officer selection. In fact, the relationship between organizational stress and all the big five factors need further exploration in order to better understand how they interact.

Further research is needed to determine if police officers perceived higher levels of occupational stress as compared to the general public. Additionally, more research is needed to determine if rural officers perceive similar levels of stress as their urban and suburban counterparts. This research would be important in clarifying the connection between perceived levels of operational and organizational stress and perceived levels of general stress.

Further research is also needed to explore organizational stress in rural departments. Studies to examine the mechanisms for reduced stress may help to inform policies in larger departments. As neuroticism has been identified across the literature as predictive of both perceived stress and performance outcomes, it appears prudent to further explore which personality assessment tools best capture neuroticism in order to screen it out. This may help determine best practices for psychologists involved in police pre-employment screenings.

Finally, as this study was not able to address the hypothesis regarding part time officers, future research needs to gather data about this population so that departments can make policy to address their needs and, hopefully, decrease their perceived stress levels.

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Appendix A

Demographic Questionnaire

1. Age: _____

2.	Gender: Male Female				
3.	Ethnicity: African American/Black				
	Hispanic/Latino				
	Asian/Pacific Islander				
	Native American/American Indian				
	White/Caucasian				
	Other				
4.	Marital Status: (check all that apply)SingleMarriedDivorced				
	SeparatedWidower				
5.	Years as a sworn police officer:				
6.	. Years with current department:				
7.	Are you full time or part time?				
	If part-time, do you work in more than one department? Yes No				
	If so, which other department(s) do you work				
8.	Current position in the department:				

Appendix B

Big Five Inventory

How I am in general

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which <u>you agree or disagree with that statement</u>.

	1 Disagree Strongly	2 Disagree a little	3 Neither agree nor disagree	4 Agree a little		5 Agree strongly	
I aı	n someone wł	ho					
1.	Is talkative			23	Tends t	o be lazy	
2.	Tends to find f	fault with others		24 1	Is emot	ionally stable, not ea	sily upset
3.	Does a thoroug	gh job		25 1	Is inver	ttive	
4	Is depressed, b	blue		26 1	Has an	assertive personality	,
5.	Is original, com	mes up with new ide	as	27	Can be	cold and aloof	
6	Is reserved			28 1	Perseve	res until the task is f	inished
7	Is helpful and	unselfish with other	s	29	Can be	moody	
8.	Can be somew	vhat careless		30	Values	artistic, aesthetic exp	periences
9	Is relaxed, han		31 Is sometimes shy, inhibited				
10	Is curious abou	ut many different thi	ings	32 1	Is consi	derate and kind to a	most everyone
11	Is full of energ	gy		33 1	Does th	ings efficiently	
12.	Starts quarrels	with others		34 1	Remain	s calm in tense situa	tions
13	Is a reliable w	orker		35 1	Prefers	work that is routine	
14	Can be tense			36 1	Is outgo	oing, sociable	
15	Is ingenious, a	a deep thinker		37 1	Is some	times rude to others	
16.	Generates a lo	t of enthusiasm		38 1	Makesj	plans and follows th	rough with them
17	Has a forgivin	ig nature		39	Gets ne	rvous easily	
18.	Tends to be di	isorganized		40 1	Likes to	reflect, play with i	leas
19	Worries a lot			41 1	Has fev	v artistic interests	
20.	Has an active i	imagination		42 1	Likes to	cooperate with oth	ers
21	Tends to be qu	uiet		43 1	Is easily	distracted	
22	Is generally tr	usting		44 1	Is sophi	sticated in art, musi	c, or literature

Appendix C

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name Date
Age Gender (Circle): M F Other
0 = Never $1 =$ Almost Never $2 =$ Sometimes $3 =$ Fairly Often $4 =$ Very Often
1. In the last month, how often have you been upset
because of something that happened unexpectedly? 0 1 2 3 4
2. In the last month, how often have you felt that you were unable
to control the important things in your life? 0 1 2 3 4
3. In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
4. In the last month, how often have you felt confident about your ability
to handle your personal problems? 0 1 2 3 4
5. In the last month, how often have you felt that things
were going your way? 0 1 2 3 4
6. In the last month, how often have you found that you could not cope
with all the things that you had to do? 0 1 2 3 4
7. In the last month, how often have you been able
to control irritations in your life? 0 1 2 3 4

8. In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
9. In the last month, how often have you been angered
because of things that were outside of your control? 0 1 2 3 4
10. In the last month, how often have you felt difficulties
were piling up so high that you could not overcome them? 0 1 2 3 4

Appendix D

Operational Police Stress Scale

Below is a list of items that describe different aspects of being a police officer. After each item, please circle how much stress it has caused you over the past 6 months, using a 7-point scale (see below) that ranges from "No Stress At All" to "A Lot Of Stress":

No stress at all)	e	Moderate Stress			A Lot of Stress
1	2	3	4	5	6	7
Shift work	• • • • • • • • • • • •	• • • • • • • • • • • •				.1 2 3 4 5 6 7
Working alone at	night					.1 2 3 4 5 6 7
Over-time demand	ds					.1 2 3 4 5 6 7
Risk of being inju	red on t	he job…				.1 2 3 4 5 6 7
Work related activ	vities on	days of	f (e.g. court, commu	nity events	s)	.1 2 3 4 5 6 7
Traumatic events	(e.g. MV	VA, dom	nestics, death, injury)		1 2 3 4 5 6 7
Managing your so	ocial life	outside	of work			.1 2 3 4 5 6 7
Not enough time a	available	e to spen	d with friends and fa	amily	•••••	.1 2 3 4 5 6 7
Paperwork						.1 2 3 4 5 6 7
Fatigue (e.g. shift	work, o	ver-time	2)			1 2 3 4 5 6 7
Lack of understan	ding fro	m famil	y and friends about	your work.		.1 2 3 4 5 6 7
Making friends ou	utside th	e job				1 2 3 4 5 6 7
Upholding a "high	ner imag	e" in pu	blic		• • • • • • • • • • •	.1 2 3 4 5 6 7
Negative commen	nts from	the publ	ic			.1 2 3 4 5 6 7
Limitations to you	ır social	life (e.g	, who your friends a	re)		1 2 3 4 5 6 7

Feeling like you are always on the job1	234	45	6 7	
Friends / family feel the effects of the stigma associated with your job1	234	45	67	

Appendix E

Organizational Police Stress Scale

Below is a list of items that describe different aspects of being a police officer. After each item, please circle how much stress it has caused you over the past 6 months, using a 7-point scale (see below) that ranges from "No Stress At All" to "A Lot Of Stress": No stress at all Moderate Stress A Lot of Stress

No stress at all	Moderate Stress	A Lot of Stress

1	2	3	4	5	6	7

1. Dealing with co-workers1 2 3 4 5 6 7
2. The feeling that different rules apply to different people (e.g. favoritism) 1 2 3 4 5 6 7
3. Feeling like you always have to prove yourself to the organization1 2 3 4 5 6 7
4. Excessive administrative duties1 2 3 4 5 6 7
5. Constant changes in policy / legislation1 2 3 4 5 6 7
6. Staff shortages
7. Bureaucratic red tape1 2 3 4 5 6 7
8. Too much computer work 1 2 3 4 5 6 7
9. Lack of training on new equipment1 2 3 4 5 6 7
10. Perceived pressure to volunteer free time1 2 3 4 5 6 7
11. Dealing with supervisors1 2 3 4 5 6 7
12. Inconsistent leadership style1 2 3 4 5 6 7
13. Lack of resources
14. Unequal sharing of work responsibilities1 2 3 4 5 6 7
15. If you are sick or injured your co-workers seem to look down on you 1 2 3 4 5 6 7

16. Leaders over-emphasize the negatives (e.g. supervisor evaluations, public complaints)

$1\ 2\ 3\ 4\ 5\ 6\ 7$

17. Internal investigations	1234567
18. Dealing with the court system	. 1 2 3 4 5 6 7
19. The need to be accountable for doing your job	1234567
20. Inadequate equipment	1 2 3 4 5 6 7