TESTING THE INVARIANCE OF WARRIOR AND GUARDIAN ORIENTATIONS ON THE
PRIORITIZATION OF PROCEDURAL JUSTICE: DO OFFICER DEMOGRAPHICS
MATTER?

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ABSTRACT

The President's Task Force on 21st Century Policing (2015) called for a shift from a warrior to a guardian mindset among police officers to help produce more procedurally-fair outcomes for the public. The current study sought to better understand the factors that contribute to whether officers value procedurally-fair interaction techniques and contribute to the limited research examining how the effects of warrior and guardian mentalities may vary based on individual officer characteristics. This allowed for an examination of the generality of the warrior and guardian orientations on perceptions of procedural justice across gender, race/ethnicity, military service, education, and experience. Analysis of survey data collected from patrol officers in two geographically different and ethnically diverse United States police departments indicated a largely invariant effect of the mentalities on officer attitudes toward procedural fairness, except for officers of color. In this sample, the guardian effect on prioritizing procedural justice was stronger for officers of color than for White officers. This study sheds light on our theoretical understanding of the warrior/guardian framework and offers practical implications for police leaders and policymakers in their effort to improve police-community relations.

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INTRODUCTION

Police reform efforts have ramped up over the past decade as the public, politicians, and police officers search for ways to avoid tragic incidents like Michael Brown in Ferguson and George Floyd in Minneapolis. A large portion of the public is calling for fairer—more procedurally just—policing in their communities in response to the pattern of excessive use of force encounters involving what some claim to be militarized, warrior-oriented officers. The President's Task Force on 21st Century Policing (2015) urged American police departments to engage in several reforms to achieve more effective and fair policing. Among their recommendations was a cultural shift from a warrior mindset in policing, where heavily armed officers see themselves as crimefighters battling evildoers, toward a guardian mentality that values service through community partnership. The President's Task Force also emphasized that procedural justice should be a guiding principle in all police activities, given its critical role in nurturing trust and legitimacy in the police. Unsurprisingly, emerging research suggests that these two issues are tied together (Rahr & Rice, 2015; Stoughton, 2015; 2016; President's Task, 2015). While research reveals that officers can hold warrior *and* guardian orientations toward their job, existing on both continuums, favorable outcomes are more common among guardian-minded officers (Clifton et al., 2021; McLean et al., 2020a). Those with stronger warrior views are less supportive of the use of procedural justice, whereas guardian-oriented officers are more likely to prioritize treating people with procedural justice. In this way, the evidence thus far suggests that increasing guardian orientations among police officers may produce more positive outcomes for the citizens they interact with.

The problem, however, lies in the absence of research examining how the effects of warrior and guardian mentalities may vary based on individual officer characteristics. While the

current conceptualization of warrior and guardian orientations would suggest that those with stronger warrior mentalities will demonstrate weaker support for procedural justice (and guardians stronger support), existing literature on the role of demographic differences points to possible variation. For example, we may anticipate a weaker impact of warrior orientations on views of procedural justice for female officers compared to their male counterparts because of the impact of socialization based on traditional gender roles (Rabe-Hemp, 2008b). Further, contrasting conclusions regarding officer race and outlook highlight the need for additional investigation into the extent to which the mindsets are associated with support for process-based policing. In understanding the potential need for the cultural shift prescribed by the President's Task Force, it is important to explore the generality of warrior and guardian mentalities on perceptions of procedural justice. If warrior/guardian mentalities have an invariant effect on officer support for procedural justice, this suggests that the impact of the mentalities on perceptions of procedural justice may not vary by demographic characteristics. Alternatively, if a general effect is absent, there is support for the idea that differences across demographics exist. Regardless of the outcome, results from such an analysis will shed light on our theoretical understanding of warrior and guardian orientations and offer practical implications for police leaders as they look to recruit, train, and supervise current and future officers.

The present study uses survey data collected from patrol officers in two geographically different United States police departments to explore how warrior and guardian mentalities are associated with officers' prioritization of procedural justice across gender, race, military service, education, and experience. The overarching goal is to better understand the factors that contribute to officers valuing (or de-valuing) procedurally-fair interaction techniques.

LITERATURE REVIEW

Warrior/Guardian Policing

The current state of police militarization in the United States, where civilian police agencies incorporate elements of armed military forces not only in appearance but also into their culture, organization, and operation, may facilitate a warrior mindset among many officers (Balko, 2013; Kraska, 2007; McNeill, 1982; Paul & Birzer, 2009; Simon, 2021). From police combatting civil unrest in the 1960s to the introduction of no-knock raids, military information sharing, and joint task forces that advanced a paramilitary approach in the Nixon, Reagan, and Bush drug wars, decades of policies chipped away at the 1898 Posse Comitatus Act which barred military interference in law enforcement (Balko, 2013; Burkhardt & Baker, 2018; Dang, 2022; Lawson, 2018; Paul & Birzer, 2009). Marking the culmination of militarization, the 1033 program enabled the Department of Defense to sell military equipment to local law enforcement agencies (Balko, 2013; Burkhardt & Baker, 2018; Dang, 2022; Delehanty et al., 2017; Paul & Birzer, 2009). Evidenced today in the lack of accountability, trust, and legitimacy in police-community relations (Balko, 2013; Burkhardt & Baker, 2018; Lawson, 2018; Marquez, 2021; Paul & Birzer, 2009) characterized by extreme action (Leiblich & Shinar, 2018) taken against citizens viewed as enemy combatants (Dang, 2022; Marenin, 2016; McNeill, 1982; Nix et al., 2018), warrior officers embody the impact of police militarization.

Drawing from the mentality of soldiers who regularly contend with life-threatening situations, police are often trained to remain hypervigilant (Simon, 2021; Stoughton, 2015). They perceive the potential for a fatal threat in every encounter, solidifying a warrior approach as their best chance of safely returning home each night (Simon, 2021; Stoughton, 2015). This mindset is characterized by a fixation on fear and danger, isolation from the community, and a prioritization

of the use of force to control subjects. Guardian-oriented officers are presented as a solution to

rectify the shortcomings of the warrior approach, namely through building relationships with the

community. However, warrior and guardian mentalities are not on opposite ends of the same

continuum (McLean et al., 2020a). Rather, an individual can simultaneously possess qualities

associated with both orientations (McLean et al., 2020a). Guardians extend and transform

warrior traits, incorporating empathy, patience, and self-reflection to assess and improve their

actions (Helfgott et al., 2018; Rahr & Rice, 2015; Stoughton, 2016).

　　　While some research suggests the situation rather than officer mindset impacts use of

force outcomes (Paoline et al., 2021), other studies identify differences in use of force attitudes

and practices based on officers' orientations toward their job (Helfgott et al., 2018; McLean et

al., 2020a; Stoughton, 2015; 2016). Officers with a warrior mentality are more likely to abuse

their authority (Helfgott et al., 2018), justify misconduct like excessive use of force and perjury

(Stoughton, 2016), and unnecessarily use force (McLean et al., 2020a). On the other hand,

guardians consider force a last resort only to be used when other approaches are exhausted,

valuing patience over physical control (Helfgott et al., 2018; McLean et al., 2023; Stoughton,

2015).

　　　Foundationally rooted in a "responsibility to protect civilians from unnecessary indignity

and harm," guardians emphasize communication in interactions with the public they serve (Rahr

& Rice, 2015; Stoughton, 2015; 2016, p. 667). Guardian officers view each citizen encounter as

an opportunity to build lasting relationships (Helfgott et al., 2018; McLean et al., 2020a;

Stoughton, 2015; 2016). As a result, police improve trust and legitimacy, allowing officers to

operate as part of the community (McLean et al., 2020a; President's Task, 2015; Rahr & Rice,

2015; Stoughton, 2015; 2016). This creates a safer, more effective policing environment defined

by a cooperating public participating in crime-solving and reporting that approaches police encounters with less confrontation and suspicion (Stoughton, 2015; 2016). Conversely, warrior-oriented police opt to gain cooperation through coercion rather than voluntary compliance (Stoughton, 2015). Minimizing the importance of communication and de-escalation, warrior officers can become isolated from communities by eroding trust and legitimacy in police (Rahr & Rice, 2015; Stoughton, 2016; Strah et al., 2023). When at odds, interactions between the public and police are more dangerous for both parties who view each other warily, leading to unnecessary risk and violence that reinforces negative stereotypes (Stoughton, 2015; 2016). Emerging evidence suggests that warrior and guardian orientations are associated with another important outcome—procedural justice (McLean et al., 2020a).

Procedural Justice

Procedural justice refers to the fairness and equity of the decision-making process by authorities (Donner et al., 2015; Rahr & Rice, 2015; Schulhofer et al., 2011). In this context, it describes how the police exercise their power during interactions with the public. Concerned with means rather than ends, four elements influence how the public assesses police procedural fairness. First, citizen participation through receiving an opportunity to voice and have their perspective heard is essential (Donner et al., 2015; Goodman-Delahunty, 2010; Jonathan-Zamir et al., 2015; Lind & Early, 1992; Mazerolle et al., 2013; Myhill & Bradford, 2013; Schulhofer et al., 2011). Second, officers must demonstrate neutrality through transparency and consistency in their decision-making (Donner et al., 2015; Goodman-Delahunty, 2010; Jonathan-Zamir et al., 2015; Lind & Earley, 1992; Mazerolle et al., 2013; Myhill & Bradford, 2013; Schulhofer et al., 2011; Terrill et al., 2016). Third, police should afford individuals dignified, respectful treatment that recognizes their rights (Donner et al., 2015; Goodman-Delahunty, 2010; Jonathan-Zamir et

al., 2015; Lind & Earley, 1992; Mazerolle et al., 2013; Schulhofer et al., 2011; Terrill et al., 2016). Finally, citizens must trust that police motives are genuinely concerned with their best interests (Donner et al., 2015; Goodman-Delahunty, 2010; Jonathan-Zamir et al., 2015; Mazerolle et al., 2013).

Lind and Tyler's (1988) group-value theory explains why procedural justice matters to people and why it is associated with positive outcomes. Those treated in a way that aligns with their values learn about their standing within a given group and understand they can take pride in its membership (Smith et al., 1998; Tyler et al., 1996). People value their membership in social groups because they desire self-validation, emotional support, and resulting material resources (Tyler, 1989). Beyond that, fair treatment produces individuals who are more likely to buy into and feel content with procedures, follow group guidelines, and comply with a sense of obligation to help, even at a cost to themselves (Lind & Early, 1992; Smith et al., 1998; Tyler et al., 1996).

Uncertainty management theory further illuminates the importance of fairness, positing that fair treatment helps people cope with uncertainty because they trust the authority and feel confident in the decision-making process (Lind & Van den Bos, 2002; Wolfe et al., 2015). If a person perceives an authority as treating them fairly, they are more willing to accept subsequent outcomes of the interaction (Jonathan-Zamir et al., 2015; Lind & Van den Bos, 2002; Tyler & Huo, 2002). However, if they feel they have not been treated fairly, they may reject decisions, react negatively, and be less likely to cooperate (Lind & Van den Bos, 2002).

Trust and legitimacy in law enforcement are considered the primary outcomes of procedural justice-based policing (Sunshine & Tyler, 2003; Tyler, 1990; Tyler & Huo, 2002). In this sense, trust is built on the observed actions of police and a belief that officers will act in the public's best interests (Murphy et al., 2014; Nix et al., 2014). Trust, "characterized by a

willingness to accept vulnerability," is particularly relevant in the context of police-citizen interactions where officers have the capacity to cause harm (Hamm et al., 2017, p. 1203; 2019). When the public trusts law enforcement, they can accept their potential for harm and still develop positive relationships with the police (Hamm et al., 2017). Legitimacy refers to citizens' belief in the rightful power held by police which is at least partially related to their personal identification or moral alignment with law enforcement on the appropriate exercising of that authority (Jackson et al., 2012; Nix et al., 2014).

In turn, perceptions of trust and legitimacy are associated with citizen cooperation with police (Bolger & Walters, 2019; Schulhofer et al., 2011; Terrill et al., 2016; Van Damme et al., 2015; Tyler et al., 2013; White et al., 2015), voluntary compliance with the law (Jackson et al., 2012; Schulhofer et al., 2011; Terrill et al., 2016; Tyler et al., 2013; Walters, 2017), and empowerment of law enforcement (Moule et al., 2019; Sunshine & Tyler, 2003; Tyler, 1990). Due to officer reliance on community cooperation through offense reporting, the ability of police to control crime can increase when they are viewed as legitimate and trustworthy (Bolger & Walters, 2019; Mazerolle et al., 2013; Schulhofer et al., 2011; Tyler, 2017). When people view the police as a legitimate and trustworthy authority, they are more likely to voluntarily comply with the law that officers represent because it is the right thing to do rather than out of fear of punishment (Sunshine & Tyler, 2003; Tyler & Huo, 2002). This avoids the police having to rely on coercion or force to gain compliance (Jackson et al., 2012). Relatedly, the public is willing to empower the police to use discretion as they see fit when they exhibit genuine motives and honest intentions (Moule et al., 2019; Sunshine & Tyler, 2003).

Warrior/Guardian Orientations and Procedural Justice

Given that procedural justice leads to trust and legitimacy which results in positive outcomes for police-community relations, it is important to understand the predictors of officers' support for using procedural justice. Organizational justice and self-legitimacy are two leading factors shown to be significantly linked with officers' views of procedural justice-based policing. Organizationally-just law enforcement workplaces are associated with officers who more strongly identify with their agency, engage in less misconduct, have increased job satisfaction, and positive perceptions of the community (Bradford et al., 2013; Myhill & Bradford, 2013; Wolfe & Lawson, 2020; Wolfe & Piquero, 2011). Internal culture reflects external behavior, and organizational justice values are congruent with the principles of process-based policing (Myhill & Bradford, 2013; Rahr & Rice, 2015). Additionally, individuals with greater self-legitimacy— more confidence in their authority—are more likely to trust agency goals—like treating citizens in a fair manner—and, subsequently, more likely to use procedural justice during their interactions with community members (Bradford & Quinton, 2014; Chen et al., 2021; Tankebe, 2019; Wolfe & Nix, 2017).

Similarly, and as discussed earlier, both warrior and guardian orientations predict procedural justice, where guardians more strongly support the use of procedural justice, and warrior officers less so (McLean et al., 2020a). The guardian mindset prioritizes the dignity and safety of members of the public through an emphasis on communication, empathy, patience, and self-reflection, where force is considered a last resort, ultimately resulting in strengthened trust and legitimacy between the community and law enforcement (McLean et al., 2020a; President's Task, 2015; Rahr & Rice, 2015; Stoughton, 2015; 2016). Instead focusing on self-preservation, the warrior mindset perceives the public through a lens clouded by suspicion, turning to coercive

control tactics, and minimizing communication and de-escalation (Rahr & Rice, 2015; Stoughton, 2016; Strah et al., 2023).

Given the role of warrior and guardian orientations as important predictors of procedural justice outcomes, it is worthwhile to better understand how the respective mentalities may apply differently to the various types of officers that comprise the existing heterogeneous police culture (Gau & Paoline, 2017; Paoline & Gau, 2017; 2022). Despite training largely modeled on military practices supporting a standardized warrior outlook, the composition of law enforcement officers continues to expand, including people with wide-ranging life experiences that fundamentally shape their perspectives. To effectively respond to the shift of cultural values advocated for by the President's Task Force, we need to explore how individual demographic factors relate to perceptions of procedural justice. This will make it possible to tailor policies aimed at officers with warrior characteristics that preclude their ability to operate in a procedurally-just manner.

The composition of local police officer gender across the U.S. has experienced a shift, with female officers increasing from 7.6% in 1987 (Reaves, 1996) to 14% as of 2020 (Goodison, 2022). Corresponding with the gradual increase in female police officers, the overwhelmingly male environment has been slow to move away from gendered role conceptualizations, as women are often ostracized from the bond—brotherhood—that defines the policing community (Dodge et al., 2010). Because of this isolation and harassment, there is pressure to conform to the existing standard, find niches that offer a better fit for stereotypically feminine roles, and work harder than male coworkers to earn respect (Dodge et al., 2010; Hunt, 1990; Rabe-Hemp, 2008a; Todak et al., 2021). Rooted in biological and socialization differences, research supports the idea that while female officers may not display warrior-associated qualities to the degree of their male counterparts, they are not necessarily more likely to use guardian-style strategies (Rabe-Hemp,

2008b). Some cite assignments to lower-risk tasks as a potential explanation for results that suggest female officers use less force (Bolger, 2015; Schuck & Rabe-Hemp, 2005). Others posit that gender does not impact use of force outcomes (Lawton, 2007) or that added context may be required to understand the role of gender (Wright & Headley, 2020). However, several studies establish that female officers emphasize communication more and use less force than male officers (Ba et al., 2021; Bolger, 2015; Dodge et al., 2010; Rabe-Hemp, 2008b; Schuck & Rabe-Hemp, 2005). Based on the evidence so far, we may expect the impact of warrior orientations on views of procedural justice-based policing to be weaker for female officers than for male officers. Conversely, the guardian mentality effect on procedural justice may be stronger for female officers than their male counterparts.

Diversification in policing has also been seen with respect to officer race and ethnicity. In 1987, only 9.3% of U.S. officers were Black, and 4.5% were Hispanic (Reaves, 1996). More than three decades later, 12% of local police officers in the U.S. are Black, and 14% are Hispanic (Goodison, 2022). Because non-White officers continue to account for a minority of law enforcement in this country, some argue that officers of color are socialized into the dominant culture on the job, created by the shared experiences of primarily White men, causing minority officers to overcome differences that may have existed, conceivably feeling pressure to conform to the dominant warrior-orientation (Clifton et al., 2021; Paoline, 2001; Paoline & Terrill, 2015). If so, we may see that officer race does not shape the extent to which warrior or guardian orientations are associated with their views of procedural justice. However, several studies found that non-White officers demonstrate more support for a guardian orientation than White officers (Gau & Paoline, 2017; Gau & Paul, 2019, Jenkins, 2017; Paoline et al., 2015; Trinkner et al., 2016). Relatedly, Clifton et al. (2021) showed that officer views toward community policing

mattered to officers of color and that non-White officers in communities of color were more supportive of the guardian orientation. Regarding race and community outlook, Gau and Paoline (2017) found that race strongly predicted a lack of cynicism, with Black and Latino police exhibiting a more positive perspective on citizens than White officers. Accordingly, as the population of officers of color grows, police culture may be changing to include greater heterogeneity in subcultural groups (Gau & Paoline, 2017). Consequently, it is necessary to see if officer race shapes the extent to which either warrior or guardian mindsets are associated with officers' support for procedural justice-based policing.

The violent veteran model posits that soldiers acquire a military mindset during their time in the armed forces that they subsequently bring to the job as law enforcement officers in the form of challenges adjusting to different use of force limitations, a lack of empathy, and impatience during public interactions (Gau et al., 2021a). However, the limited studies that investigate this claim do not support it. Instead, such studies have found quite the opposite, suggesting that military experience can better equip officers to manage stressful encounters and prepare them for the physical and operational aspects of their duties (Gau et al., 2021a; Shernock, 2016). Gau et al. (2021a) concluded that military experience does not cause a militarized mindset, nor does it impact officer suspicion or perceptions of danger except potentially to minimize fear. More research is needed to examine the role of military experience on important officer attitudes and behavioral preferences. This study aims to build on the literature by exploring whether military experience impacts the extent to which warrior or guardian orientations are associated with support for procedural justice.

An argument for variance in outcomes by level of education originates from the era of professionalization in policing, but today derives from a belief that those with additional

education have a better-developed worldview and advanced communication skills (Paoline & Terrill, 2007; Rydberg & Terrill, 2010). In the absence of literature examining the relationship between level of education and warrior/guardian orientations, use of force studies serve as proxy due to the association between the use of excessive force and the warrior mindset, and because the decision to use force is subject to discretion potentially impacted by education (Rydberg & Terrill, 2010). Numerous analyses signal that police officers with advanced schooling use fewer verbal threats and less physical force than officers with only a high school education (Chapman, 2012; Paoline & Terrill, 2007; Rydberg & Terrill, 2010). However, a consensus on the role of education in predicting officer attitudes and behaviors does not exist (Peterson, 2001). This study explores how officer education level influences the relationship between warrior/guardian mentalities and support for procedural justice. Perhaps education serves as a protective factor against otherwise warrior attitudes by giving such officers appreciation for nuance in civilian encounters. In other words, educated officers may be less likely to have their warrior orientations play a role in their support for procedural justice.

Expectations for the impact of length of experience also rely on use of force research due to a shared lack of investigation in the context of warrior and guardian mentalities. Paoline et al. (2007) found that police officers with more experience use fewer verbal threats and less physical force. While many examinations conclude that as experience increases, use of force decreases (Garner et al., 2002; Kaminski et al., 2004; McElvain & Kposowa, 2008; Terrill & Mastrofski, 2002), others found experience played no role (Alpert et al., 2004). Although analysis is limited, researchers argue that officers with less on-the-job experience are not as prepared to handle stressful situations and may be less tolerant of perceived disrespect, resulting in more frequent use of force incidents (McElvain & Kposowa, 2004). In this way, warrior orientations may have

a stronger effect (and guardian mentalities a weaker effect) on support for procedural justice among officers with fewer years of experience. If so, this also implies that more experience may shield officers from the harmful effects of warrior orientations on procedural justice and increase the positive effects of guardian mentalities.

METHODS

Data

Over two weeks between late March and early April of 2017, survey data were collected

from patrol officers from the Fayetteville (NC) Police Department (FPD) and the Tucson (AZ)

Police Department (TPD) as part of a larger experimental evaluation of an officer training

program funded by the National Institute of Justice (NIJ; only pre-test survey data were used in

this study; Alpert et al., 2022). The FPD's 164 patrol officers served a population of 205,000 at

the time of the survey, compared to 320 patrol officers in the TPD that served 530,000 people. In

addition to the geographic diversity provided by the two cities, each is differently ethnically

diverse, with Fayetteville composed of 46% White and 42% Black residents. Tucson is home to

47% White and 42% non-White Hispanic/Latino residents. In collaboration with personnel at

both agencies, researchers distributed questionnaires in person at roll call meetings after

presenting a brief introduction emphasizing that participation was anonymous and voluntary.

Accounting for various absences (e.g., sick or court leave), researchers collected data from a

sample that represented 82.4% of all patrol officers in both cities.

Variables

Independent Variables

McLean et al. (2020a) demonstrated that warrior and guardian orientations can be

empirically measured and that each is best represented on separate scales. Using a two-factor

model they showed that warrior and guardian mentalities are distinct but not mutually exclusive,

where officers may be warriors, guardians, or demonstrate characteristics of both. Accordingly,

eight items were used to evaluate police officer mindsets with statements including "*My primary*

responsibility as a police officer is to fight crime" to assess the warrior mentality and "*As a*

police officer, I have a primary responsibility to protect the constitutional rights of residents" for

the guardian orientation (a list of all warrior and guardian items is presented in Appendix A).

Each statement was coded using a five-point Likert scale where 1 = *strongly disagree*, 2 =

disagree, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*. Principal-axis factoring (PAF) showed

the items loaded on two factors, one for warrior items (eigenvalue = 0.73, all loadings > 0.53),

and the other for guardian items (eigenvalue = 1.91, all loadings > 0.41). Accordingly, two

separate weighted factor scores were constructed, one for the *warrior* orientation (*r* = 0.50), and

one for the *guardian* orientation (α = 0.71). Higher scores on the measures corresponded with a

stronger warrior or guardian orientation, respectively. Table 1 displays descriptive statistics for

all analysis variables.

Table 1. *Summary statistics and Pearson's correlation coefficients*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Prioritization of Proc. Justice	—										
2. Warrior	−0.007	—									
3. Guardian	0.324	0.184	—								
4. Org. Justice	0.200	0.079	0.254	—							
5. Self-legit.	0.341	0.174	0.558	0.370	—						
6. Female	−0.018	0.042	0.069	0.006	0.085	—					
7. Racial Minority	0.153	0.090	0.074	0.201	0.170	−0.002	—				
8. Military	0.006	0.078	−0.004	0.003	−0.027	−0.114	0.074	—			
9. Bachelors	−0.039	−0.018	0.116	−0.082	0.033	0.113	−0.145	−0.024	—		
10. Experience	0.016	−0.082	−0.072	−0.324	−0.162	−0.107	−0.027	0.032	−0.122	—	
11. Fayetteville	0.093	0.033	−0.016	0.092	0.100	0.018	−0.047	0.063	−0.087	−0.154	—
M or percentage	4.16	3.65	4.04	3.02	4.12	13.78%	40.20%	39.10%	37.03%	2.03	39.10%
SD	0.64	0.76	0.48	0.80	0.60	—	—	—	—	1.25	—

Moderator Variables

The growing body of research pointing to the heterogeneity of police culture guided the

current exploration of demographic characteristics of individual police officers as potential

conditioning factors in the relationship between warrior and guardian orientations and

perceptions of procedural justice (Ingram et al., 2013; 2018; Paoline & Pau, 2017; Paoline & Terrill, 2014). Gender was treated as a binary variable where 0 = *male* and 1 = *female* (variable written as "*female*"). Officer race/ethnicity was coded as a binary variable where 0 = *White/Caucasian* and 1 = *Minority* which included respondents who self-identified as Hispanic/Latino, Black/African American, Native American, Asian/Pacific Islander, and Other (variable written as "*minority*"). Military experience, another binary variable, was coded in response to the question "*Have you served in the military?*" where 0 = *no* and 1 = *yes* (variable written as "*military*"). *Bachelors* was a binary variable capturing officers' education level where answers to "*What is your highest level of education?*" were coded so that 0 = *less than a bachelor's degree* and 1 = *bachelor's degree or higher*. Level of *experience*, measured in response to the question "*How long have you worked in law enforcement?*" was an ordered categorical variable where 0 = *1-4 years*, 1 = *5-9 years*, 2 = *10-14 years*, 3 = *15-19 years*, and 4 = *20 years or more*.

Control Variables

Organizational justice and self-legitimacy were treated as control variables to account for alternative predictors of procedural justice (Bradford et al., 2013; Bradford & Quinton, 2014; Chen et al. 2021; Myhill & Bradford, 2013; Rahr & Rice, 2015; Tankebe 2019; Wolfe & Lawson, 2020; Wolfe & Nix, 2017; Wolfe & Piquero, 2011). Ten items were used to capture the four elements of organizational justice: procedural, distributive, informational, and interpersonal justice. For example, procedural justice was measured with statements like "*Command staff considers employees' viewpoints*" and distributive justice with *"My agency's policies regarding internal decisions (e.g., promotion, discipline) are applied consistently*." Further, informational justice was assessed with such statements as "*Command staff clearly explains the reasons for*

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their decisions" and interpersonal justice with "*I trust that command staff makes decisions that have employee's best interest in mind*" (all items are presented in Appendix A). Each item was coded on a five-point Likert scale where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*. The items were developed based on existing organizational justice literature (Bradford et al., 2014; Colquitt, 2001; Wolfe et al., 2018; Wolfe et al., 2019; Wolfe & Lawson, 2020). PAF indicated the items loaded on a single factor (eigenvalue = 5.37, all loadings > 0.57) and scale items had strong internal consistency (α = 0.92). Accordingly, a weighted factor score was constructed where higher scores on the scale indicated stronger perceptions of *organizational justice*.

Self-legitimacy was measured using six items that included statements such as "*I have confidence in the authority vested in me as a law enforcement officer*" (see Appendix A for all survey items). The scale was coded where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*. Developed based on previous self-legitimacy research (Bottoms & Tankebe, 2012), the items had strong internal consistency (α = 0.84) and a PAF showed they loaded on a single factor (eigenvalue = 3.08, all loadings > 0.58). Higher values on the weighted factor score were associated with greater *self-legitimacy*. Finally, *site* was a binary variable that differentiated between the two study locations where 0 = *Tucson* and 1 = *Fayetteville*.

Dependent Variable

Officers' prioritization of procedural justice was evaluated using a vignette describing an interaction between a police officer and a citizen where the officer responds to a suspicious person call and is faced with an angry, uncooperative suspect (see Appendix A). Then, respondents indicated the importance they would place on each of a series of eight statements, for example, "*Treating the subject respectfully*" and "*Earning the subject's trust*" (see Appendix

A for full list of items). The statements were coded on a five-point Likert scale where 1 = *not important* and 5 = *very important*. These items were developed by McLean et al. (2020b) to assess how police officers prioritize procedural justice throughout citizen encounters and they capture each component of the concept (Jonathan-Zamir et al., 2015). PAF demonstrated the items loaded on a single factor (eigenvalue = 3.84, all loadings > 0.60) and had strong internal consistency (α = 0.87). A weighted factor score was created with these items where higher scores indicated a stronger *prioritization of procedural justice* during the citizen encounter.

Analytic Strategy

The current study aimed to investigate the generality of warrior and guardian mentalities by testing the extent to which the orientations have an invariant effect on officers' prioritization of procedural justice across individual officer demographics. To do so mean-centered interaction terms were created between the warrior and guardian scales with each of the officer demographic characteristics (i.e., gender, race, military service, experience, and education; dummy variables were not mean-centered; Aiken & West, 1991; Long & Freese, 2006). Statistically significant interaction effects would indicate that the influence of warrior or guardian orientations on the prioritization of procedural justice is moderated by the respective demographic characteristics. To gain a more comprehensive understanding of the nature of the interaction and create a graphical depiction of the relationship, the *margins* command in Stata 18 was used to explore any statistically significant interaction effects. All models are estimated using ordinary least squares (OLS) regression because the dependent variable approximated normality (skewness = – 0.41; kurtosis = 2.45).

RESULTS

Table 2 presents results regarding whether individual officer demographics moderate the relationship between warrior and guardian orientations and the prioritization of procedural justice. Each model estimates the effect of the respective interaction term while controlling for the other demographic characteristics and orientation, as well as organizational justice, self-legitimacy, and study site. For example, the first column ("Female") and the first row ("Warrior * [Variable]") present the unstandardized partial regression coefficients and standard error for the interaction effect between female officers and warrior orientations on the prioritization of procedural justice.

**Table 2.** *The effect of warrior/guardian orientations on procedural justice across demographics*

Interaction variable:	[Female]		[Minority]		[Military]		[Bachelors]		[Experience]	
Prioritization of Proc. Justice	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)
Warrior * [Variable]	−.100(.128)	—	.091(.084)	—	.085(.085)	—	−.018(.085)	—	.012(.034)	—
Guardian * [Variable]	—	−.152(.184)	—	.301*(.133)	—	.193(.132)	—	.093(.140)	—	.018(.056)
Warrior	−.063(.045)	−.074(.042)	−.112(.054)	−.083(.042)	−.109(.054)	−.079(.042)	−.068(.054)	−.073(.042)	−.076(.042)	−.075(.042)
Guardian	.274*(.079)	.300*(.083)	.270*(.079)	.147(.096)	.266*(.079)	.201*(.093)	.273*(.079)	.245*(.090)	.273*(.079)	.279*(.080)
Female	−.056(.088)	−.052(.089)	−.063(.088)	−.066(.087)	−.054(.088)	−.061(.088)	−.059(.089)	−.065(.088)	−.062(.088)	−.060(.088)
Racial Minority	.122(.066)	.122(.066)	.119(.066)	.114(.066)	.118(.066)	.122(.066)	.121(.066)	.117(.066)	.120(.066)	.121(.066)
Military	.003(.064)	.008(.064)	.005(.064)	.009(.064)	.006(.064)	.009(.064)	.006(.064)	.006(.064)	.008(.064)	.008(.064)
Bachelors	−.034(.066)	−.037(.066)	−.042(.065)	−.046(.065)	−.036(.066)	−.042(.065)	−.040(.066)	−.042(.066)	−.041(.066)	−.040(.066)
Experience	.043(.027)	.042(.027)	.041(.027)	.045(.027)	.043(.027)	.043(.027)	.042(.027)	.041(.027)	.042(.027)	.043(.028)
Org. Justice	.065(.044)	.067(.045)	.062(.045)	.069(.044)	.068(.045)	.065(.044)	.066(.045)	.066(.045)	.065(.045)	.066(.045)
Self-legit.	.233*(.066)	.228*(.066)	.230*(.066)	.242*(.066)	.233*(.066)	.227*(.066)	.228*(.066)	.229*(.066)	.232*(.066)	.223*(.066)
Fayetteville	.117(.064)	.117(.064)	.115(.064)	.123(.064)	.119(.064)	.117(.064)	.120(.064)	.126(.065)	.119(.064)	.118(.065)
Constant	2.878(.293)	2.900(.292)	2.910(.292)	2.828(.292)	2.868(.294)	2.907(.292)	2.900(.293)	2.901(.293)	2.97(.277)	2.99(.277)

Note. *p < .05

The analyses indicate that while most of the interaction effects were not significant, the *guardian* orientation * *racial minority* interaction effect is significantly and positively associated with prioritizing procedural justice ($b = .301$, $p < .05$). This means that the strength of the guardian effect on procedural justice depends on whether an individual officer identifies as part

of a racial/ethnic minority group. Figure 1 allows us to visualize this interaction effect where we see that the guardian orientation effect on prioritizing procedural justice is stronger for non-White officers than for their White counterparts. In other words, the guardian orientation is associated with the prioritization of procedural justice to a greater degree among officers of color. Overall, these results officer evidence that within the current sample, there is a general effect of warrior and guardian mentalities on the prioritization of procedural justice across demographic characteristics (except for race/ethnicity and the guardian orientation). Simply, warrior and guardian mentalities are associated with officers' prioritization of procedural justice similarly regardless of gender, military service, level of education, or length of experience.

Figure 1. *Interaction effect between guardian orientation and racial minority*
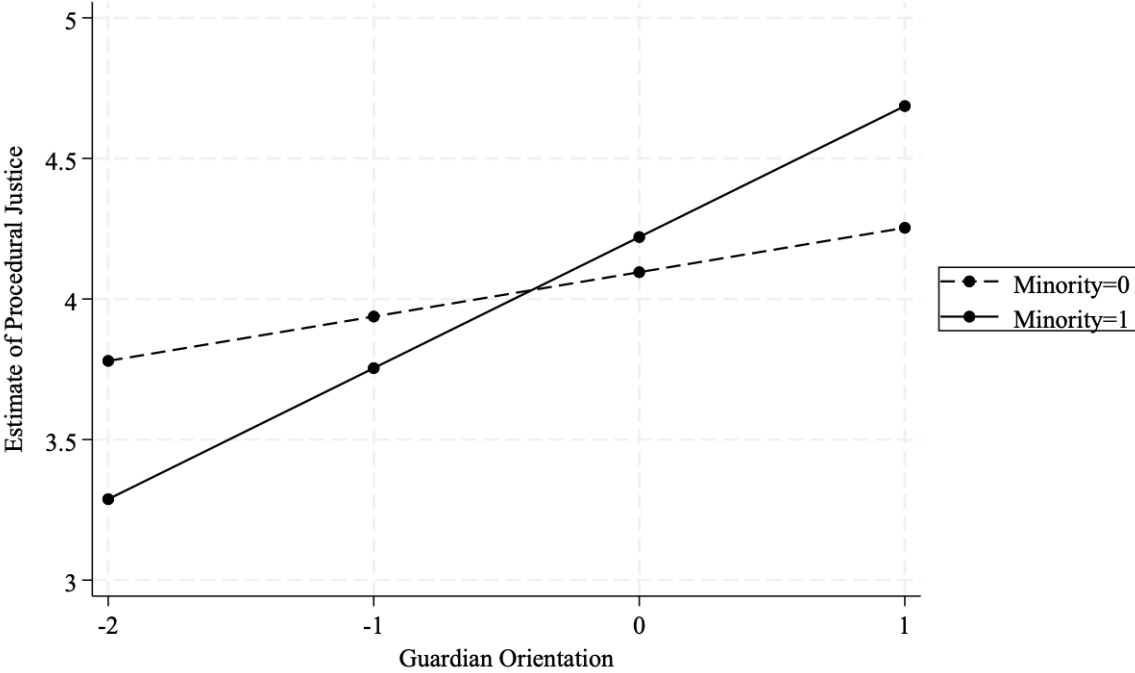
It is also worth noting that the results show the guardian orientation effect on prioritizing procedural justice for all but one of the 10 models is statistically significant ($p < .05$, average $b = .253$). That is, after accounting for the potential interaction effects, there was a direct effect of the guardian mentality and not the warrior orientation on procedural justice. Although a stronger

guardian orientation may facilitate procedural justice, stronger warrior characteristics do not appear to hinder officers' prioritization of procedural justice. Additionally, self-legitimacy has a statistically significant effect ($p < .05$) on the prioritization of procedural justice across all the models presented in Table 2 (average $b = .231$). This indicates that officers with greater self-legitimacy more strongly prioritize procedural justice during hypothetical citizen encounters. Contrasting the conclusions of existing literature, organizational justice did not have a significant effect on the prioritization of procedural justice (Chen et al., 2021; Myhill & Bradford, 2013).

DISCUSSION

In response to the intensifying calls for police reform, the President's Task Force on 21ˢᵗ Century Policing (2015) repackaged the classic objective of creating the "good policeman" by outlining the need for a switch from warrior to guardian-oriented officers guided by procedural justice. However, the literature historically shows that rather than an officer who only uses one technique to accomplish their goals, an ideal officer should be able to appropriately apply both passion and perspective, one with the bravery to run toward gunfire and the empathy and patience to communicate with people on their worst days (Klockars, 1980; Muir, 1977). Further, recent research indicates that rather than a single spectrum, the warrior and guardian mentalities operate on two separate continuums where a single officer can simultaneously possess qualities associated with both orientations (McLean et al., 2020a). While the current understanding of the mentalities indicates that officers with a stronger warrior orientation will show less support for procedural justice (and guardians more support), existing investigations into the role of demographic differences point to possible variation. To support the effort for improved trust and legitimacy in police-community relations, this study adds to research that treats the warrior and guardian orientations with the necessary complexity. The study also addresses a gap in the literature by exploring the extent to which the mentalities have a general effect on officer prioritization of procedural justice or whether they are constrained to certain individual attributes. As a result, four findings from this thesis require further discussion.

There was an invariant effect of the warrior and guardian mentalities across most of the individual officer characteristics investigated in the current sample. In other words, the warrior and guardian mentalities were associated with officers' prioritization of procedural justice similarly across differences in gender, military service, level of education, and length of

experience. This finding adds to a theoretical understanding of factors that may (or may not) impact officers' prioritization of procedurally-fair behavior in their interactions with the public and contributes to the finite body of research examining the role of such factors on officers' attitudinal outcomes. If agencies hope to shift officers toward guardian attributes and away from warrior characteristics, this evidence indicates that training may similarly influence attitude changes in officers regardless of these factors and could play an important role in recruitment tactics. But, of course, this is an empirical question awaiting future inquiry.

Notably, there was a statistically significant interaction effect of the guardian orientation on officers in the "minority" group, meaning that the strength of the guardian effect on prioritizing procedural justice depends on whether an officer identified as a racial/ethnic minority. In this sample, the guardian effect on prioritizing procedural justice was stronger for officers of color than for White officers, a finding congruent with existing literature that demonstrates non-White officers showed more support for a guardian orientation than White officers (Gau & Paoline, 2017; Gau & Paul, 2019; Jenkins, 2017; Paoline et al., 2015; Trinkner et al., 2016). This finding offers evidence that the guardian orientation effect on how officers value procedural justice is not invariant across all characteristics. As police culture expands to include more heterogeneity in subcultural groups, the face of law enforcement is changing. While this result could suggest that racial/ethnic diversification in policing could lead to positive outcomes, further research is needed to determine whether officers of color are more likely to have guardian views. Guardian survey questions may have been interpreted differently across racial groups. Perhaps non-White officers were more likely to consider how they serve underprivileged communities than White officers when responding to the measure about their support for procedural justice. Alternatively, this result could reflect the uniquely racially

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representative police departments surveyed in the current study. Although this investigation alone is insufficient to guide policy recommendations, it justifies additional research to explore whether this finding applies to behavioral outcomes and if officers of color may better employ procedural justice practices in their interactions with the community.

The direct guardian effect on prioritizing procedural justice was statistically significant for all but one model. There was a direct effect of the guardian orientation, and not the warrior mentality, on prioritizing procedural justice after accounting for the interaction effect. Simply put, in the current study, a stronger guardian orientation was associated with greater prioritization of procedural justice, but a stronger warrior orientation was not related to such prioritization. However, this result may only apply to the current findings and should be interpreted with caution. Substantive meaning is difficult to determine from this result because the present model includes interaction effects. Moreover, other studies clearly show that stronger warrior orientations are associated with negative outcomes among officers, such as a lack of support for de-escalation tactics and procedural justice, and more support for excessive use of force (McLean et al., 2020a; Wolfe et al., 2024). In short, more research is needed to better understand the role of warrior orientation on officer attitudes and behavioral outcomes.

Finally, self-legitimacy and not organizational justice had a significant effect on officers' prioritization of procedural justice across all models. While this may underline the importance of self-legitimacy in supporting the prioritization of procedurally-fair strategies among officers, it contrasts with empirical evidence that establishes organizational justice as a predictor of procedural justice (Bradford et al., 2013; Myhill & Bradford, 2013; Wolfe & Lawson, 2020; Wolfe & Piquero, 2011). Importantly, this finding resulted from a model that included interaction effects where previous research did not and should be interpreted as such. Additional research is

necessary to determine whether self-legitimacy is more important than organizational justice in predicting procedural justice prioritization.

Despite its contribution to warrior/guardian and procedural justice literatures, several limitations in this study provide opportunities for future research. First, a vignette was used to measure patrol officers' prioritization of procedural justice. While warrior and guardian mentalities were not associated with how officers prioritized procedural justice differently across individual characteristics (i.e., they have a more "general" effect), except in the case of those belonging to a racial/ethnic minority, the current study did not examine behavioral outcomes. Existing research establishes that attitudes are not always representative of behavior and therefore, officers' attitudes surrounding the use of procedural justice may not manifest in their use of such communication strategies (Waddington, 1999; Worden, 1989). Future studies should incorporate methods including systematic behavioral observation, analysis of body-worn cameras, or in-person interviews to establish the behavioral impact of the warrior and guardian mentalities on using procedural justice.

Second, the present study uses cross-sectional data, providing only a snapshot from one point that does not capture whether the mentalities are stable over time. Smith and Alpert (2007) discuss the illusory correlation as it applies to racial bias in policing, where an officer who observes negative behaviors from a group of people can mistakenly over-ascribe those behaviors to that group and develop an unconscious bias reinforced by cultural stereotypes. In this context, an officer may join the police force with a guardian approach but, over time, transition toward the warrior orientation based on an illusory correlation developed during their duties. Indeed, recent research suggests that officers may develop cognitive distortions as a result of police subcultural socialization processes that result in negative outcomes such as extreme warrior

orientations (Sierra-Arévalo, 2021; Wolfe et al., 2024). An ideal study would incorporate longitudinal behavioral analysis measuring changes in officer mentalities and their impact on the use of procedural justice to address this gap.

A third limitation surrounds the narrow assessment of the warrior mentality. Hindering the exploration of the variety of elements encompassed by warrior orientation, only two measures were used to evaluate the warrior mentality in this study (compared to six for the guardian orientation). The false narrative that the warrior orientation is only negative fails to capture the diverse features that comprise the warrior mindset or acknowledge the impossibility of choices officers face as part of their discretionary decision-making process (Klockars, 1980). This shortcoming points to a need for future studies to evaluate a more complete picture of the warrior orientation, including elements considered potentially detrimental (e.g., a thin blue line mentality) and those viewed as potentially desirable (e.g., running toward danger).

Finally, all demographic moderator variables except experience were treated as binary. Because the literature that explores the relationship between officer characteristics and behavioral outcomes offers varying conclusions about the extent to which these factors have an impact, binary variables may not sufficiently address the complexity of those relationships. For example, while police patrol may not necessarily include adequate diversity to incorporate more than two categories for gender and race, simply asking whether an officer was in the military does not encapsulate the breadth of experiences they could have. By incorporating detailed survey questions aimed at differentiating more specifically among characteristics and collecting data from more than two research sites, future studies can explore demographic factors with greater complexity.

In the end, this research adds empirical evidence to the largely theoretical discussion of the warrior and guardian framework in policing. Results suggest that the effect of the mentalities on officers' prioritizations of procedural justice is largely invariant except in the case of minority officers and that the warrior mentality did not have a detrimental relationship with officers' perceptions of procedural fairness. Future studies should examine behavioral outcomes rather than attitudes across a larger sample to allow for a more complex evaluation of the role of individual characteristics. Ultimately, this paper refocuses the existing dichotomous understanding of the mentalities and highlights the need for a more complex consideration of the warrior orientation to improve police-community relations.

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Table 3. *Scale Properties of Measures*

Warrior/Guardian Orientation[a]	Warrior Factor Loadings	Guardian Factor Loadings
1. Enforcing the law is a patrol officer's most important responsibility.	0.58	—
2. My primary responsibility as a police officer is to fight crime.	0.53	—
3. I routinely collaborate with community members in my daily duties.	—	0.41
4. Law enforcement and community members must work together to solve local problems.	—	0.59
5. As a police officer, I have a primary responsibility to protect the constitutional rights of residents.	—	0.58
6. A primary responsibility of a police officers is to build trust between the department and the community.	—	0.61
7. As a police officer, it is important that I have non-enforcement contacts with the public.	—	0.50
8. As a police officer, I see myself primarily as a civil servant.	—	0.50
Eigenvalue	0.73	1.91

Organizational Justice[a]	Factor Loadings
1. My agency's policies regarding internal decisions (e.g., promotion, discipline) are applied consistently.	0.72
2. My agency's policies are designed to allow employees to have a say in agency decisions (e.g., assignment changes).	0.78
3. My agency's investigation of civilian complaints is fair.	0.65
4. Landing a desirable assignment in my agency is based on whom you know[b]	0.62
5. If you work hard, you can get ahead at this agency.	0.72
6. My agency can be trusted to do what is right for the community.	0.57
7. Command staff considers employees' viewpoints.	0.82
8. Command staff treats employees with respect.	0.73
9. Command staff clearly explains the reasons for their decisions.	0.82
10. I trust that command staff makes decisions that have employee's best interest in mind.	0.85
Eigenvalue	5.37

Table 3. *(cont'd)*

Self-legitimacy[a]	*Factor Loadings*
1. I have confidence in the authority vested in me as a law enforcement officer.	0.72
2. I am confident that I have enough authority to do my job well.	0.75
3. I believe law enforcement is capable of providing security for all citizens of the community.	0.58
4. I feel that I represent the values of the public in my local community.	0.70
5. I feel my job positively impacts the community I serve.	0.82
6. I understand how my work contributes to the success of my agency.	0.72
Eigenvalue	3.08

Procedural Justice[c]	*Factor Loadings*
1. Treating the subject respectfully	0.66
2. Establishing rapport with the subject	0.66
3. Explaining the reason you've made contact with the subject	0.60
4. Treating the subject politely and with dignity	0.79
5. Allowing the subject to explain his side of the story	0.79
6. Considering the subject's side of the story	0.72
7. Explaining to the subject the reasons for your decisions	0.65
8. Earning the subject's trust	0.66
Eigenvalue	3.84

[a] Items were measured using a scale where 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.
[b] Reverse-coded
[c] Respondents ranked item importance after reading a vignette, "While on patrol, you receive a call regarding a suspicious person in the parking lot of a busy strip mall. You have little information and do not know whether the subject has a weapon, but arrive at the scene and make contact with a male who fits the description you were given. He appears to be angry, is being loud, using profanity, and occasionally breaks eye contact and looks around the shopping area. The subject continues to slowly walk backwards away from you despite your order to stop." Items were measured on a scale where *1 = not important, 5 = very important*.