



RESEARCH ARTICLE

# Examining firefighter and police officers' trust and service quality: What resources matter?

Carol Flinchbaugh<sup>1</sup> , Jennifer Miles<sup>2</sup>, Bahareh Javadizadeh<sup>3</sup> , Yanni Liang<sup>1</sup> and William L. Smith<sup>1</sup>

<sup>1</sup>College of Business, New Mexico State University, Las Cruces, NM, USA; <sup>2</sup>Knauss School of Business, University of San Diego, San Diego, CA, USA and <sup>3</sup>Lam Family College of Business, San Francisco State University, San Francisco, CA, USA  
**Corresponding author:** Bahareh Javadizadeh; Email: [javadi@sfsu.edu](mailto:javadi@sfsu.edu)

(Received 17 November 2022; revised 6 November 2023; accepted 10 December 2023)

## Abstract

We present and test a model examining the role of organizational and psychological resources that enable employees' high-quality service provision in public safety jobs. Through a two-study design conceptualized in the principle of reciprocity of social exchange theory, we recruited 120 firefighters and 119 police officers and found that service quality was positively associated with their trust in the administration, training, and staffing sufficiency. We also found that police officers' prosocial motivation, as a psychological resource, amplifies the relationship between trust in administration and service quality. The beneficial role of prosocial motivation in police officers' service quality appears to counter recent research suggesting that prosocial motivation has a dark side in demanding contexts. Our findings contribute to and highlight essential connections between distinct resources that positively impact the service quality of firefighters and police officers in dangerous and emotionally demanding job roles.

**Keywords:** trust; organizational resources; prosocial motivation; service quality; public safety

Fire and police departments' effectiveness is of particular importance to any community. As public safety providers (PSPs), the departments bear the legal responsibility to protect and serve the public (Boyce, Ciulla, Jones, Boone, Elliott, & Combs, 2008) in risky job roles (Hällgren, Rouleau, & De Rond, 2018). Understanding what leads to fire and police departments' service effectiveness may be more relevant than ever given the public scrutiny surrounding their actions (McGovern & Phillips, 2017). The quality of service provided by municipal fire and police departments has been scrutinized at local and national levels worldwide (e.g., public media and citizen groups) (Ellis & McGovern, 2016; McGovern & Phillips, 2017), including in the USA, France, India, and Australia (Cheatham & Maizland, 2022). Other nations with histories of authoritarian rule (i.e., Latin American countries) grapple with issues related to constitutional safeguards and citizen safety with rising crime rates and hope that community-oriented policing will build community trust (Malone & Dammert, 2021).

From a community perspective, the ease of virtually sharing the PSPs' (hereforth, we use PSP or first responders to represent firefighters and police officers) actions across social media outlets fosters heightened awareness within local communities and facilitates the cultivation of a reliable and authoritative presence. This, in turn, safeguards public accountability and promotes transparency (Fallik, Deuchar, Crichlow, & Hodges, 2020). On the other hand, community trust perceptions are eroding at a record pace in countries like the United States (O'Connor, 2017; Russell, 2018), increasing the danger experienced by PSPs (Baka, 2020; Ricciardelli et al., 2020), and leaving municipalities with challenges in hiring recruits (Mission Square Research Institute, 2023; Wilson & Grammich, 2009).

Public scrutiny may be appropriate as first responder performance begets important implications for citizen safety, municipality reputation, and overall trust in public agencies.

The importance of trust is not limited to citizens. PSPs' trust perceptions of departmental administration also matter, given the routine uncertainty and danger in a first responder job. PSPs deal with high levels of job, physiological, and psychological stress, which is influenced by the organizational support (Brunetto, Farr-Wharton, Wankhade, Saccon, & Xerri, 2023) and psychological safety climate (Farr-Wharton, Brunetto, Hernandez-Grande, Brown, & Teo, 2022) they feel at work. PSPs depend upon their administration to assure appropriate equipment, sufficient staffing levels for assistance from other PSPs, and post hoc administrative support for their decision-making in crisis moments. The value of trust, a psychological 'intention to accept vulnerability based upon positive expectations of the intentions or behavior of another' (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 385), can reduce uncertainty in highly uncertain contexts (Dirks & Ferrin, 2001, 2002). Earlier trust research in PSP contexts has identified the importance of perceived trust among coworkers, linked employee trust with competence among law enforcement officers (Lindberg & Rantatalo, 2015), and improved trust reports from firefighters stemming from their coworkers' integrity and benevolence (Colquitt, LePine, Zapata, & Wild, 2011). Moving beyond coworker trust, we know when employees feel safe with organizational leaders, experience lower stress (Brunetto et al., 2023; Farr-Wharton et al., 2022), are more engaged (Brunetto et al., 2023), and are more likely to engage with others in extra-role behaviors (Mayer & Gavin, 2005) that contribute to service performance gains (Colquitt et al., 2011; Dirks & Ferrin, 2002). Likewise, PSPs' trust in administration (i.e., chiefs and lieutenants) is crucial since administrators provide first responders with the necessary resources (i.e., personnel, equipment, and training) to meet their needs in community crises, facilitating PSPs provision of quality service to their community. Thus, the purpose of this study is to understand what resources PSPs need to maintain trust in their administration and how these resources influence their service quality.

The discernment of what leads to PSPs' improved trust in administration in the uncertain and dangerous first responder job role is critical. Administration plays a decisive, often final role in the decision-making of resource allocation, and extant research has found that organizational support, from PSPs' perspectives, is often insufficient (Brunetto et al., 2020; Brunetto, Xerri, & Farr-Wharton, 2022; Hupe & Buffat, 2014). First responders such as police and firefighters are often subject to the public sector gap, wherein the resources provided to these street-level bureaucrats are inadequate to meet the demand for public services (Hupe & Buffat, 2014). Resources, as defined in the management literature, exist as either organizational or individual capacities, conditions, or characteristics that are valuable on their own or as part of the value-creation process to improve performance (Fagan & Ployhart, 2015; Hobfoll, 2001). At the organizational level, resources can include leadership support, organizational mission, or management practices (Fagan & Ployhart, 2015). Individual resources are the knowledge, skills, abilities, and other employee capacities that add value to an organization. Earlier findings report how the presence of sufficient organizational resources (e.g., training and staffing) has led to increased employee trust (e.g., De Jong & Dirks, 2012; Dirks & Ferrin, 2002; Schaubroeck, Peng, & Hannah, 2013). Another body of literature has outlined the value of employees' psychological resources as precursors to quality service delivery (e.g., Aryee, Walumbwa, Seidu, & Otaye, 2016; Ehrhart, Witt, Schneider, & Perry, 2011; Liao, Toya, Lepak, & Hong, 2009), commitment and reduced turnover intentions (Brunetto, Shacklock, Teo, & Farr-Wharton, 2014), and engagement (Brunetto et al., 2020). However, limits remain in understanding the role of organizational and psychological resources, in combination, as antecedents to trust development and quality service provision in municipal police and fire departments.

We draw on the principle of reciprocity in social exchange theory (SET) (Ladd & Henry, 2000), wherein manager's actions toward employees trigger a cascade of reciprocal attitudinal and behavioral responses and lead to the formation of a relationship (Cropanzano, Anthony, Daniels, & Hall, 2017). Manager-employee 'relationships evolve into trusting, loyal, and mutual commitments' that stem from the reciprocal exchanges existing between the two parties (Cropanzano & Mitchell, 2005, p. 875)

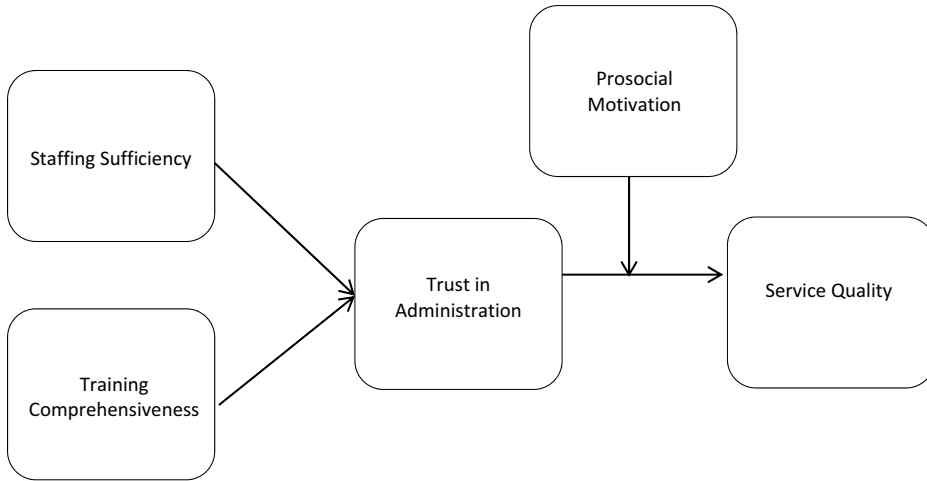
such that benevolent treatment from administration begets employee reports of an increased positive orientation toward management and the organization (Cropanzano *et al.*, 2017; Ehrhart *et al.*, 2011). Administrators' positive initiating actions, such as allocating resources to employees (Riggle *et al.*, 2009), amplify employee trust perceptions. With resource gains, employees feel obligated to reciprocate to 'do right' in the relationship (Brower, Lester, Korsgaard, & Dineen, 2009) by putting forth greater effort in terms of enhanced role performance (Brower *et al.*, 2009; Cropanzano *et al.*, 2017; Cropanzano & Mitchell, 2005; Dirks & Ferrin, 2002). Based on the relational nature of trust in SET (Blau, 1964), we consider the reciprocal relationship between administrators' provision of organizational resources, employees' psychological resources and trust in the administration, and PSP service performance.

This study seeks to make several contributions to the management literature. First, we assess whether trust in administration operates as an underexamined organizational resource to foster reciprocity and subsequently influence first responders' service quality. By theorizing antecedents and outcomes of trust in the relationship between administration and employees (Reiche *et al.*, 2014), we extend the SET literature by providing a more robust understanding of how the staffing and training decisions made by administrators may affect PSPs' perceived trust in leadership and service quality. Second, we explore the contingent effect of employee prosocial motivation, a psychological resource that enables employees to focus on the welfare of others with no expectations of personal gains (Grant, 2008), as an amplifying mechanism in the organizational resource–service quality relationship. Prosocial motivation might enable PSPs to engage in quality service levels above and beyond the influences of staffing or training on administrative trust, even within physically and emotionally demanding job contexts. Third, the study adds a new understanding of employee performance in the frontline, stressful, highly scrutinized, and risky service sector roles (Farr-Wharton *et al.*, 2022; Grant & Sumanth, 2009; Hällgren, Rouleau, & De Rond, 2018; Purba & Demou, 2019; Van Gelderen, Konijn, & Bakker, 2017) by discernment of distinct resources enabling PSPs to serve and protect citizens effectively.

We examine the role of organizational and psychological resources on trust perceptions and service quality in a sample of firefighters and police officers from one municipality located in the Southwestern United States through two studies. By using the synchronic approach of studying two different coping agencies, we are able to compare responses, consider the role that context plays in our findings (Hupe & Buffat, 2014), and answer the call to expand public administration research beyond just police departments to include a better understanding of fire departments as well (Henderson & Charbonneau, 2016). In Study 1, we test the mediating role of trust in administration in the relationship between organizational resources (*i.e.*, staffing sufficiency and training comprehensiveness) and quality service performance. In Study 2, we extend the aforementioned mediating relationship to test a moderated mediation model to examine whether staffing sufficiency and training comprehensiveness will increase employee service quality through trust in administration when accompanied by prosocial motivation. Our full hypothesized model is shown in Fig. 1.

### Importance of the context

Fire and police departments provide a unique setting for researchers to examine performance outcomes stemming from the context-specific resources they perceive are valuable in their risky job roles (Hällgren, Rouleau, & De Rond, 2018). There are similarities and differences between firefighters and police officers' role responsibilities. Similarities exist in their immediate response to emergency calls. Both occupations are physically and emotionally demanding and involve periods of physical exertion in dangerous situations (Bacharach, Bamberger, & Doveh, 2008; McCarthy, Trougakos, & Cheng, 2016; Purba & Demou, 2019; Scholarios, Hesselgreaves, & Pratt, 2017). In their responder roles, firefighters are often first at the scene confronting dangerous elements and potential criminal activity (Boyce *et al.*, 2008) and increasingly respond to medical emergencies



**Figure 1.** Hypothesized second-stage moderated mediation model.

(Hällgren, Rouleau, & De Rond, 2018). Success in these risky roles requires police officers and firefighters to provide safe and reliable service (Colquitt et al., 2011) during unpredictable and adverse events (Bigley & Roberts, 2001; Scholarios, Hesselgreaves, & Pratt, 2017). In addition to responding to crisis events, first responders in both job roles provide routine community safety services (Colquitt et al., 2011), such as interacting with and educating the public, or preparing reports and writing field notes.

Despite these similarities, the requirements of community protection in these two departments also differ. Firefighters serve to protect people's lives and properties in disasters, such as fires or car accidents (Junyoul, Taeil, & Jungmin, 2017), whereas police officers aim to protect the public from various criminal activities (Brunetto et al., 2020; Noblet, Maharee-Lawler, & Rodwell, 2012). The characteristics of firefighting require firefighters to execute a variety of physically challenging tasks under extreme environmental conditions, making the job one of the most physically demanding and dangerous occupations (Bureau of Labor Statistics, 2019) and resulting in high levels of occupational stress, psychological distress, and emotional exhaustion (Purba & Demou, 2019; Young, Partington, Wetherell, St Clair Gibson, & Partington, 2014). Firefighters often require extensive levels of teamwork to sustain personal safety and support team success (Pratt, Lepisto, & Dane, 2019). The role of a police officer, while not without danger, can be more mentally challenging and isolating (Boyce et al., 2008) than that of the firefighters. The routine physical demands in this job are less intensive than in firefighting, and police officers often respond to calls alone (Golembiewski & Kim, 1990), such as when police officers self-dispatch a traffic stop or approach a suspicious person while on a routine patrol. The solo nature of policing affords them with heightened levels of discretionary power in how they perform their roles (Farr-Wharton et al., 2021) though perceptions of discretionary power have been shown to differ across countries (Brunetto et al., 2020). These differences in the job roles of police officers and firefighters, especially the difference in team (i.e., firefighter) versus solo (i.e., police officer) responders, might indicate the need for different organizational and psychological resources for effective job performance. To discern the potential differences, we examine our hypotheses in two separate departmental studies.

## Theoretical framework and hypotheses

### Organizational resources

For some time now, a body of scholarly work has examined the positive impact of staffing and training on organizational and employee performance gains (e.g., Ganster & Dwyer, 1995). More recent

attention on employee performance in service roles has highlighted the positive effects of staffing sufficiency and training comprehensiveness on employee performance (Aguinis & Kraiger, 2009; Greer, Carr, & Hipp, 2016; Sitzmann & Weinhardt, 2018). However, more research is needed to shed light on how staffing sufficiency and training comprehensiveness may influence novel mechanisms in the service quality value chain (Greer, Carr, & Hipp, 2016; Liebermann & Hoffmann, 2008; Ployhart, 2006), especially in the public sector. Prior staffing literature in the public safety domain concentrates on employee diversity and the types of selection tools used in hiring firefighters and police officers (Lievens, De Corte, & Westerveld, 2015; McFarland, Ryan, Sacco, & Kriska, 2004). The training literature in this context is limited primarily to training interventions for physical preparedness for role responsibilities (Baka, 2020; Henderson, Berry, & Matic, 2007), failing to assess police and firefighters' perceptions of training comprehensiveness. The roles of staffing sufficiency and training comprehensiveness are largely unexplored and limit what we know about service effectiveness in such physically and emotionally demanding, dangerous, and risky roles (Bacharach, Bamberger, & Doveh, 2008; Bigley & Roberts, 2001; McCarthy, Trougakos, & Cheng, 2016).

### *Staffing sufficiency*

Staffing sufficiency, also referred to as staffing adequacy, is the extent to which an organization has a sufficient number of employees to complete the expected job roles and responsibilities (Spence, 1978; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). Spence (1978) originally conceptualized how sufficient staffing could signal an employer's care, respect, and consideration for their employees. Early empirical work advanced this conceptualization by establishing relationships between staffing sufficiency and a variety of job-related attitudes and job enrichment (Vecchio & Sussmann, 1981). Other research on staffing sufficiency, primarily limited to hospital contexts, shows how sufficient staffing can reduce employee burnout and turnover intentions and also improve patient satisfaction (Kane, Shamliyan, Mueller, Duval, & Wilt, 2007; Vahey et al., 2004). In the public safety context, McCabe and O'Connell (2017) recently reported a positive relationship between the number of police officers and the level of crime but failed to discern the relationship between staffing levels and police performance. Brunetto et al. (2014) found a link between organizational support and engagement, commitment, and turnover intentions for police officers and nurses but did not examine the role that staffing levels have on performance. This limited research assumes that appropriate staffing sufficiency levels can improve both service outcomes and employee perceptions. However, to test and extend these assumptions, scholars have called for more attention to the intervening mechanisms in the relationship between staffing levels and employee attitudes and behavior (e.g., Ployhart, 2006). In this paper, we consider PSPs' perceptions of staffing sufficiency through the principle of reciprocity rather than per capita, minimum-staffing, or authorized-level staffing approaches that may be used to make budgeting decisions (Brunetto & Beattie, 2020).

Administrators' provision of appropriate staffing signals an awareness of employee workloads and highlights administration consideration for employee success and well-being (Baka, 2020; Dirks & Ferrin, 2002; Rousseau et al., 1998). In this sense, PSPs perceive management's commitment to maintaining adequate staffing levels as a form of positive behavior that signifies organizational support (Baka, 2020). In turn, PSPs' assessment of administrative support via adequate staffing levels elicits their positive reaction back to management (Cropanzano et al., 2017). In response to the felt staffing support, employees experience gratefulness toward the organization for providing them with a positive work experience (i.e., providing sufficient staff), which is known to inspire enhanced reciprocity and relation-based trust between employees and the organization (Balkin & Richebé, 2007; Ng, 2016). Thus, based on the extant research that found employee trust as a positive response to managerial decisions (Colquitt et al., 2011; Dirks & Ferrin, 2001; Schoorman et al., 2007), we surmise that PSPs who report sufficient staffing levels will also maintain a trusting orientation toward administration. Thus:

**Hypothesis 1a:** Staffing sufficiency will be positively associated with trust in the administration.

### *Training comprehensiveness*

Following the same logic of the principle of reciprocity, we contend that PSPs' perceptions of training comprehensiveness may also facilitate a similar increase in trust in administration, given that the allocation of training resources, such as the type and frequency of training, falls under management's purview. However, to date, this relationship has received limited attention in the literature. Comprehensive training equips firefighters and police officers with the necessary skills and resources to address uncertain and dangerous situations (Aguinis & Kraiger, 2009; Sitzmann & Weinhardt, 2018). Before employees engage in behavioral changes following workplace training, they often first report a change in their psychological states, such as increased enthusiasm, commitment, or motivation (Paulsen & Kauffeld, 2017). Employees' improved psychological state may stem from perceived management support, including management's understanding of the workplace environment, expertise in allocating the necessary training resources, and investment in employees' long-term growth and overall well-being (e.g., Lambooj, Flache, Sanders, & Siegers, 2007). Employees perceive administrations' competence and consideration in providing comprehensive training opportunities, which, in turn, triggers employees' reciprocal feelings of goodwill and trust toward management (Mayer, Davis, & Schoorman, 1995; Rousseau et al., 1998). Thus, we posit that PSPs will view administration allocation of training resources, in this dangerous context, as a sign of care and benevolence from the administration (Aguinis & Kraiger, 2009), a necessary prerequisite to trust perceptions (Mayer, Davis, & Schoorman, 1995). Thus, we hypothesize that:

**Hypothesis 1b:** Training comprehensiveness will be positively associated with trust in the administration.

### *Trust in administration and service quality*

Based on existing findings from the extant literature, we surmise that increased levels of trust in administration may enhance PSPs' overall service quality. Trust has been associated with several operational outcomes, including citizenship behaviors (Mayer & Gavin, 2005) and job performance (Aryee et al., 2002; Colquitt et al., 2011). The relationship between trust in administration and heightened performance has been found to develop through several mechanisms. Trust in administration leads to higher levels of information exchange between subordinates and supervisors (e.g., Rich, 1997), facilitates the sharing of resources among employees, and reduces employee engagement in nonproductive behaviors (Methot, Lepine, Podsakoff, & Christian, 2016). Through heightened reciprocal exchanges, managers can provide rapid, corrective feedback to guide employees to improved performance (e.g., Schaubroeck, Peng, & Hannah, 2013). Such ongoing exchanges enhance a trusting relationship wherein employees are more likely to accept and apply this feedback to improve their performance (Dirks, 2000). When employees trust their manager, employees are more confident in providing creative solutions to challenging situations and sharing negative and problem-indicated information without fear of managerial retaliation (Baer et al., 2015; Dirks & Ferrin, 2001). Critical to PSPs, employee trust in administration also influences employees' perceptions of safety in the workplace, which should enhance performance outcomes. Perceptions of organizational support and relationships with supervisors have also been shown to influence employee engagement for police officers (Brunetto et al., 2020, 2014), which should also enhance performance outcomes.

Extrapolating these findings to our study, we posit that trust in administration functions like other psychological attributes (e.g., job satisfaction, psychological safety climate, and perceived organizational support) to trigger positive psychological conditions (Brunetto et al., 2020; Dirks & Ferrin, 2002, 2001; Farr-Wharton et al., 2022), such as confidence, a sense of safety, openness to new ideas, reduced stress, employee engagement, and collaboration that enhances service quality. In service settings, employees working in similar positive psychological conditions are often more sensitive and responsive to others' feelings and thus show more care, respect, and consideration to customers in

their service performance (Li & Tan, 2013). Thus, we expect similar quality service will result when firefighters and police officers report trust in their administration. We offer:

**Hypothesis 2:** Trust in administration will be positively associated with service quality.

### *The mediating role of trust*

Our prior hypotheses have informally outlined the mediating role of trust in administration in the relationship between staffing sufficiency, training comprehensiveness, and service quality. By formally conceptualizing trust in administration as a mediator in this relationship, we contribute to the literature by explaining the role of employee perceptions toward administration in the relationship between staffing and training and employee service performance in a context beyond the technology sector (Chang & Chen, 2002). Moreover, our focus on trust in administration examines a novel resource that may facilitate employee performance in the face of risky jobs and heightened stressors, such as dangerous contexts, fatigue, erratic shift hours, or physical demands (Henderson, Berry, & Matic, 2007; Purba & Demou, 2019; Vila, 2006; Vila, Morrison, & Kenney, 2002; Young *et al.*, 2014).

The mediating role of trust in administration conceptualized in SET posits that individuals, in response to favorable initiating actions, will generally reciprocate by offering more positive behavioral responses or reducing negative responses (Cropanzano *et al.*, 2017). Specific to our research, a series of reciprocal exchanges following the administrative provision of additional resources (*i.e.*, staffing and training) evolve into development of trust toward the administration. When administrators help address the public sector gap, first responders should view administrators more positively. Specifically, PSPs who receive comprehensive training and sufficient staffing in their job would more readily perceive these resources as a positive initiating action that signals support from the administration (Balkin & Richebé, 2007). In turn, PSPs will more readily develop affective organizational commitment (Meyer *et al.*, 2002) and foster a greater sense of trust (Dirks & Ferrin, 2002; Konovsky & Pugh, 1994). In the presence of heightened administrative trust, employees are more likely to respond positively, using their new skills and capabilities gained from organizational resources (*e.g.*, staffing and training) to improve their service quality. Therefore, we hypothesize that:

**Hypothesis 3a:** Trust in administration mediates the relationship between staffing sufficiency and service quality.

**Hypothesis 3b:** Trust in administration mediates the relationship between training comprehensiveness and service quality.

### *Prosocial motivation as an individual resource*

Up to this point, we have identified staffing sufficiency and training comprehensiveness as organizational resources that influence PSP trust in the administration and improve employees' service quality. Another resource that may be critical to PSPs, especially for police officers' quality service provision, is their desire to help others or their prosocial motivation. Prosocial motivation, or 'the desire to benefit other people' (Grant, 2008, p. 48), is a valuable psychological resource for employees working in mission-driven, community-oriented street-level organizations (*e.g.*, Grant & Berry, 2011; Grant & Sumanth, 2009; Hu & Liden, 2015; Zhu & Akhtar, 2014). Such organizations exist to help the community, and employees in these organizations work in roles that directly benefit the lives of others. In the case of police and fire departments, these coping agencies carry out public regulation tasks (Hupe & Buffat, 2014) that can save lives. Benefiting others is a key characteristic of prosocial motivation, and prosocially motivated employees who work for mission-driven organizations value the opportunity to help or care for another's well-being, providing these individuals with quality service (Grant & Sumanth, 2009). Prosocially motivated employees often display altruistic acts and are more willing

to put the organizational mission or the interests of those served by the organization above their own (Meglino & Korsgaard, 2004) and provide higher levels of service in community-based work (Grant, 2008).

For example, Witt and Broach (1993) found that procedural justice is related to satisfaction, but this relationship was stronger among individuals who held favorable beliefs regarding reciprocity. Extending earlier work on prosocial motivation, we consider the interactive effects of police officers' prosocial motivation and their trust in administration on their service performance. Based on the socially appropriate principles of reciprocity (Cropanzano et al., 2017), we contend that when officers trust their administration and are motivated to do well for others, they are more likely to share information with colleagues, identify novel responses, and maintain positive attitudes about their job (Dirks & Ferrin, 2001; Schaubroeck, Peng, & Hannah, 2013). In this case, police officers who concurrently sense trust from their administrators and are prosocially motivated to help others amplify their ability to perform at higher service levels despite the uncertainty and perceived risk inherent in their jobs. On the other hand, we posit that police officers with low prosocial motivation lack the intrinsic drive to serve the community and are less inclined to embody social reciprocity norms to provide high service quality even when they trust their administration. Thus, contributing to the known value of prosocial motivation and trust found in research in more sedentary, low-risk job roles (Grant & Sumanth, 2009), we examine this relationship with police officers' service quality when working in jobs characterized by high levels of risk, uncertainty, and demands. Thus, we propose:

**Hypothesis 4:** Prosocial motivation moderates the relationship between trust in administration and service quality.

### *Overview of studies*

A key strength of this paper is that our variables and data sources were operationalized to align with the reciprocal resource exchanges conceptualized in SET. Two of the coauthors consulted with the police and fire department chiefs in a local municipality for roughly 2 years as participants in the municipality's Public Safety Committee. The coauthors worked with the chief and two deputy chiefs from the respective departments. The chiefs and deputy chiefs represent the department administration. The chiefs and deputy chiefs were males, each with over 20 years of service in the department. The police chief was Hispanic, and the other chiefs were Caucasian. As members of the Public Safety Committee, the coauthors conducted numerous needs assessments to outline departmental strategic goals that informed municipal funding decisions. No notable public safety incidents beyond the typical police and fire responses occurred during the timeframe of this research. Through forum discussions, individual qualitative interviews, and monthly committee meetings, the coauthors used an inductive approach to identify key constructs and develop trust and staffing measures appropriate for the setting. The researchers assured the anonymity of responses and that the chiefs would be provided with the finding summaries. The result was a comprehensive set of studies completed approximately 3 months apart. In Study 1, we examine our initial mediation model. In Study 2, we seek to replicate the findings of Study 1 in a new sample and examine the moderating role of prosocial motivation.

## **Study 1**

### *Method*

#### *Participants and procedures*

Study participants were non-civilian employees of the fire department in a medium-sized city in the southwest United States. The department chiefs and deputy chiefs supported employee participation in the study as an effort to inform the decisions made in the Public Safety Committee. Employees were given paid time during their regular shifts to complete the paper surveys. About 120 employees



participated in the study. All department employees except for the chief and two deputy chiefs participated in the study. The majority of participants were male (97.4%). They ranged in age from 21 to 55 years ( $M = 35.74$ ,  $SD = 7.55$ ) and had been with the fire department for an average of 9.23 years ( $SD = 5.91$ , range: 0–23 years). Among them, 38.3% were identified as White, 38.3% as Hispanic or Latino/Latina, 9.2% as two or more races, 3.3% selected Other, 1.7% as Black or African-American, 1.7% as Native Hawaiian or Pacific Islander, 8% as American Indian or Alaskan Native, and 6.7% elected not to provide their race.

### Measures

All items were measured using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Staffing sufficiency.** Participants rated how sufficient they felt the staffing was on their shift using four items adapted from the Revised Nursing Work Index developed by Vahey *et al.* (2004) and three related items created for this study ( $\alpha = .85$ ). An example of an adapted item is ‘There are enough firefighters on my shift to provide quality emergency services’. The three new items are ‘There are enough firefighters on my shift to address simultaneous crises’, ‘There are enough firefighters on my shift to provide necessary back up’, and ‘There are enough firefighters on my shift to provide quality community engagement’.

**Perceived training comprehensiveness.** We used four items adapted from Ehrhardt, Miller, Freeman, and Hom (2011) to measure perceived training comprehensiveness ( $\alpha = .71$ ). An example scale item is ‘I receive many hours of training in my work role’.

**Trust in administration.** Participants rated their trust in administration using five items developed for this study through consultation requests and qualitative interviews with the department chiefs. These items were ‘My immediate supervisor keeps my interests in mind when making decisions’, ‘If my immediate supervisor asked why a problem occurred, I would speak freely even if I were partly to blame’, ‘I trust the chiefs (fire chief, deputy chiefs) to be fair in their treatment of me’, ‘I trust the chiefs (fire chief, deputy chiefs) to be fair in their support of me’, and ‘I trust the chiefs (fire chief, deputy chiefs) to have the needs and concerns of the employees as a priority’. The internal reliability for the scale is  $\alpha = .88$ .

**Service quality.** Participants rated the service quality provided by their shift using nine items adapted from Parasuraman, Zeithaml, and Berry (1988) ( $\alpha = .88$ ). An example item includes, ‘On my shift, the firefighters are effective in listening to citizens’ needs’.

## Analysis and results

### Confirmatory factor analysis

To provide evidence for the discriminant validity of the study’s variables, we conducted confirmatory factor analyses (CFAs) and used chi-square difference tests to compare our hypothesized four-factor model to three alternative nested models. First, we test our hypothesized measurement model with the 25 items that make up our substantive variables loading on four factors. We found all of the factor loadings to be significant ( $p < .001$ ), and 24 of the items had loadings of acceptable magnitude. For the sake of parsimony and to ensure a reasonable ratio of sample size to the number of estimated parameters, we created parcels for staffing sufficiency and service quality (Little, Cunningham, Shahar, & Widaman, 2002). We used factor analytic results to implement the balancing approach to parcel creation and created three parcels for each of the parceled measures (Little, Rhemtulla, Gibson, & Schoemann, 2013). The hypothesized four-factor measurement model demonstrated a good fit to the data ( $\chi^2 = 161.83$ ,  $df = 84$ , comparative fit index (CFI) = .93, Tucker-Lewis index (TLI) = .91,

**Table 1.** Means, standard deviation (SD), and correlations between Study 1 variables

Variable	Mean	SD	1	2	3	4
1. Staffing Sufficiency	4.45	1.11	(.85)			
2. Training Comprehensiveness	5.56	.90	.43**	(.71)		
3. Trust in Administration	4.93	1.33	.47**	.29**	(.88)	
4. Service Quality	5.87	.74	.36**	.29**	.35**	(.88)

Note:  $n$  ranges from 119 to 120. Cronbach's  $\alpha$ s appear on the diagonal.

\* $p < .05$ , two-tailed.

\*\* $p < .01$ , two-tailed.

root mean square error of approximation (RMSEA) = .09, standardized root mean squared residual (SRMR) = .07).

Next, we compared our hypothesized four-factor model to three alternative models. In the first alternative model, we created a three-factor model that combined staffing sufficiency and training comprehensiveness into one factor. Compared to our hypothesized model, the three-factor alternative was a significantly worse fit for the data (CFI = .86, TLI = .83, RMSEA = .12, SRMR = .09,  $\Delta\chi^2 = 74.69$ ,  $\Delta df = 3$ ,  $p < .001$ ), providing support for the hypothesized model. In the second model, we created a two-factor alternative model to examine the discriminant validity of our trust in administration items by combining all of the predictor variables (staffing sufficiency, training comprehensiveness, and trust in administration) into one factor. This two-factor model was a significantly worse fit (CFI = .68, TLI = .63, RMSEA = .18, SRMR = .13,  $\Delta\chi^2 = 266.71$ ,  $\Delta df = 5$ ,  $p < .001$ ) for our data than our hypothesized model. In our third alternative model, we assessed the presence of common method variance (CMV). We compared our hypothesized model with a one-factor model in which all items were loaded onto a single latent factor. Compared to our hypothesized model, the one-factor model ( $\chi^2 = 610.68$ ,  $df = 90$ , CFI = .51, TLI = .43, RMSEA = .22, SRMR = .16,  $\Delta\chi^2 = 448.85$ ,  $\Delta df = 6$ ,  $p < .001$ ) fit the data significantly worse. These findings provide evidence that CMV did not substantially bias our results.

### Hypothesis testing

Table 1 reports the descriptive statistics for all Study 1 variables. The pairwise correlations are based on sample sizes ranging from 119 to 120 because one participant was missing responses on the four staffing sufficiency items. Missing data were handled using the FIML function in Mplus.

We tested our mediation model using path analysis in Mplus 7. We also used bootstrapped estimates from 1,000 samples to construct bias-corrected confidence intervals (CIs) (Shrout & Bolger, 2002). Using path analysis, we estimated two regression equations: one regressed the mediator on the independent variables, and the other regressed the outcome on the independent variables and the mediator. These estimates reflect (a) the direct effects of staffing sufficiency and training comprehensiveness on trust in administration (Hypotheses 1a and 1b, respectively), (b) the direct effects of trust in administration on service quality (Hypothesis 2), and (c) the indirect effects of staffing sufficiency and training comprehensiveness on service quality through trust in administration (Hypotheses 3a and 3b, respectively).

In support of Hypothesis 1a, staffing sufficiency was positively and significantly related to trust in administration ( $b = .53$ ,  $p < .01$ , 95% CI [.29, .73]). Hypothesis 1b was not supported, as the path between training comprehensiveness and trust in the administration was positive but not significant ( $b = .17$ , n.s., 95% CI [−.12, .47]). We did find support for Hypothesis 2: trust in administration was positively and significantly related to service quality ( $b = .12$ ,  $p < .05$ , 95% CI [.03, .21]). Hypotheses 3a and 3b predicted that trust in the administration would mediate the relationships on staffing sufficiency and training comprehensiveness, respectively, and service quality. We found partial support for these hypotheses. The indirect effect of staffing sufficiency on service quality through trust in the administration was significant (indirect effect = .06, 95% CI [.02, .12]), supporting Hypothesis 3a.

However, the indirect effect of training comprehensiveness on service quality through trust in the administration was not significant (indirect effect = .02, 95% CI [-.01, .08]), so Hypothesis 3b was not supported.

### Study 1 discussion

We found support for the direct and mediating relationships between staffing sufficiency, trust in the administration, and service quality. However, we failed to find significance with training comprehensiveness (Hypotheses 1b, 3b). These findings suggest that sufficient staffing levels are associated with heightened service quality and enhance firefighters' perceived trust in the administration. The lack of significance with training comprehensiveness, while unexpected, may result from the team-oriented nature of firefighting. Firefighters spend the bulk of their shift together in the fire station, debriefing recent service calls as well as socializing and completing physical training while waiting for emergency calls. When responding to emergency calls, the firefighters again rely on their team to address emergency issues. It may be that in this team-oriented context, firefighters equate their training comprehensiveness more with their close peer interactions in the firehouse than from training resources provided by administrators.

### Study 2

In Study 2, we seek to replicate the findings from Study 1 using a sample of police officers to provide further support for our model and improve the external validity of our results. To discern the distinction of police officers working alone as compared to the team-oriented nature of firefighting, we also include prosocial motivation as a potential moderator in trust in administration and service quality relationship (Hypothesis 4).

### Method

#### Participants and procedures

Participants of this study were non-civilian employees of the police department in the same city as Study 1. Employees were again given paid time during their workday to complete the paper surveys. 119 employees participated in the study. To remove potential bias in the responses, two coauthors led the data collection and verified that no administrators ever viewed survey responses. The majority of participants were male (92.4 percent). They ranged in age from 22 to 56 years old ( $M = 34.30$ ,  $SD = 7.48$ ) and had been with the police department for an average of 8.01 years ( $SD = 5.64$ , range: 0 to 24 years). 52.6% identified as Hispanic or Latino/Latina, 32.7% as White, 5.2% as two or more races, 4.3% as Black or African-American, 2.6% selected other, 1.7% as Asian, and .9% as Native Hawaiian or Pacific Islander.

#### Measures

All items were measured using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Variables used in the previous study (staffing sufficiency, perceived training comprehensiveness, trust of administration, and service quality) were measured using the same items as the previous study, just adapted for the police department instead of the fire department (e.g., 'firefighters' was changed to 'officers' and 'emergency services' was changed to 'law enforcement').

Participants' perceptions of *staffing sufficiency* were rated using the same 7-item scale from Study 1 ( $\alpha = .92$ ). Participants also rated their perceptions of *training comprehensiveness* using the same 4-item scale used in Study 1 ( $\alpha = .73$ ). Participants then rated their *trust in administration* using the same five items used in Study 1 ( $\alpha = .82$ ). Finally, participants rated the *service quality* provided by their shift using the same 9-item scale used in Study 1 ( $\alpha = .90$ ).

**Table 2.** Means, standard deviations (SD), and correlations between Study 2 variables

Variable	Mean	SD	1	2	3	4	5
Staffing sufficiency	3.99	1.49	(.92)				
Training comprehensiveness	5.49	1.12	.47**	(.73)			
Trust	4.70	1.41	.53**	.61**	(.82)		
Prosocial motivation	5.82	.88	.01	.06	.13	(.93)	
Service quality	5.57	.87	.43**	.32**	.43**	.21*	(.90)

Note:  $n = 119$ . Cronbach's  $\alpha$ s appear on the diagonal.

\* $p < .05$ , two-tailed.

\*\* $p < .01$ , two-tailed.

**Prosocial motivation.** We adapted a five-item measure of prosocial motivation that was developed and validated by Grant and Sumanth (2009) ( $\alpha = .93$ ). Example items include 'It is important to me to have the opportunity to use my abilities to benefit the community' and 'I get energized by working on tasks that have the potential to benefit the community'.

## Analysis and results

### Confirmatory factor analysis

Following the same parceling procedures as Study 1, in order to provide evidence for the discriminant validity of the variables in Study 2, we conducted CFAs and used chi-square difference tests to compare our hypothesized five-factor model to three alternative nested models. The hypothesized five-factor measurement model demonstrated a good fit to the data ( $\chi^2 = 247.60$ ,  $df = 160$ , CFI = .95, TLI = .94, RMSEA = .07, SRMR = .09). Compared to our hypothesized model, the four-factor alternative with a single independent variable (combining staffing sufficiency and training comprehensiveness onto one factor) was a significantly worse fit for the data (CFI = .89, TLI = .87, RMSEA = .10, SRMR = .11,  $\Delta\chi^2 = 104.97$ ,  $\Delta df = 4$ ,  $p < .001$ ). Next, compared to our hypothesized model, a four-factor alternative with a single factor representing the mediator and moderator items was also a significantly worse fit for the data (CFI = .68, TLI = .63, RMSEA = .17, SRMR = .20,  $\Delta\chi^2 = 470.18$ ,  $\Delta df = 4$ ,  $p < .001$ ). Finally, compared to our hypothesized model, the one-factor model ( $\chi^2 = 1206.85$ ,  $df = 170$ , CFI = .40, TLI = .32, RMSEA = .23, SRMR = .20,  $\Delta\chi^2 = 959.25$ ,  $\Delta df = 10$ ,  $p < .001$ ) fit the data significantly worse. These findings provide support for our hypothesized model and evidence that CMV did not substantially bias our results.

### Hypothesis testing

Table 2 reports the descriptive statistics for all Study 2 variables. We used the path analytic procedures recommended by Edwards and Lambert (2007) to test our hypothesized second-stage moderated mediation model. This method has the advantage of combining moderated regression analysis and path analysis with bootstrapping mediation approaches to test the significance of indirect effects (Courtright, Colbert, & Choi, 2014). To implement this procedure, we used Mplus 7 and Mplus code developed by Preacher, Rucker, and Hayes (2007). We mean-centered our mediating and moderating variables in all models to avoid issues with multicollinearity. We also used bootstrapped estimates from 1,000 samples to construct bias-corrected CIs (Shrout & Bolger, 2002) in all of our analyses. Following the two-step approach recommended by Edwards and Lambert (2007), we first used path analysis to estimate two regression equations (Model 1), one of which regressed the mediator on the independent variables and the other regressed the outcome on the independent variables and the mediator. These estimates reflect (a) the direct effects of staffing sufficiency and training comprehensiveness on trust in administration (Hypotheses 1a and 1b), (b) the direct effects of trust in administration on service quality (Hypothesis 2), and (c) the indirect effects of staffing sufficiency

**Table 3.** Path analytic tests of hypothesized and alternative models

Path estimated	Model 1 (Mediation)	Model 2 (first-stage moderated mediation)	Model 3 (hypothesized second-stage moderated mediation)	Model 4 (full effects model)
<b>Study 1 – Fire Department</b>				
Staffing → Service	.14*			
Training → Service	.11			
Staffing → Trust	.50**			
Training → Trust	.17			
Trust → Service	.12**			
Indirect effects <sub>(Staffing)</sub>	.06 <sup>†</sup>			
Indirect effects <sub>(Training)</sub>	.02			
<b>Study 2 – Police department</b>				
Staffing → Service	.16**	.16**	.13**	.15**
Training → Service	.02	.02	-.02	.01
Staffing → Trust	.29**	.28**	.29**	.28**
Training → Trust	.59**	.56**	.59**	.56**
Trust → Service	.17*	.17*	.13	.15
Indirect effects <sub>(Staffing)</sub>	.05 <sup>†</sup>			
Indirect effects <sub>(Training)</sub>	.10 <sup>†</sup>			
Prosocial motivation (PM) → Service			.20*	.22**
Trust × Prosocial motivation → Service			.19*	.31**
Indirect effects <sub>(Staffing)</sub> – Low PM			-.01	
Indirect effects <sub>(Staffing)</sub> – Medium PM			.04 <sup>†</sup>	
Indirect effects <sub>(Staffing)</sub> – High PM			.09 <sup>†</sup>	
Indirect effects <sub>(Training)</sub> – Low PM			-.02	
Indirect effects <sub>(Training)</sub> – Medium PM			.08	
Indirect effects <sub>(Training)</sub> – High PM			.18 <sup>†</sup>	
Prosocial motivation → Trust		.16		.16
Staffing × Prosocial motivation → Trust		.10		.10
Training × Prosocial motivation → Trust		-.02		-.02
<i>R</i> <sup>2</sup> Generalized	.58	.61	.63	.66
<i>W</i> <sup>‡</sup>	22.36**	15.158**	9.592	–

Note: Study 1: *N* = 120; Study 2: *N* = 119. Values represent unstandardized path estimates.

\**p* < .05.

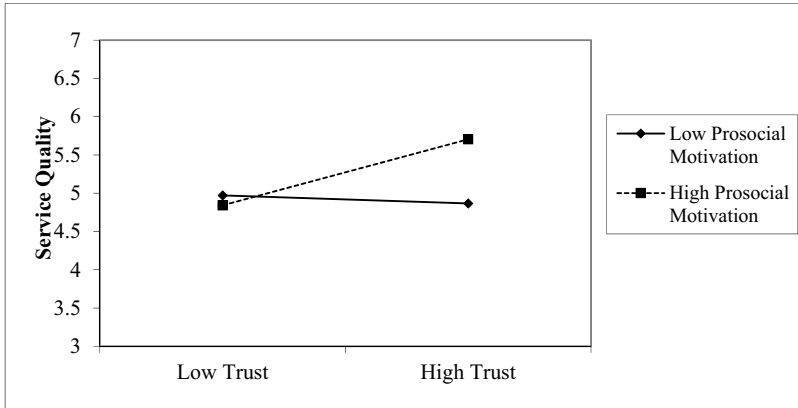
\*\**p* < .01.

<sup>†</sup>95% Confidence interval does not include zero.

<sup>‡</sup>In computing the *Q* and *W* statistics, all models were compared with Model 4.

and training comprehensiveness on service quality through trust in administration (Hypotheses 3a and 3b). The results of our hypothesis testing are shown in Table 3.

In support of Hypothesis 1a, staffing sufficiency was positively and significantly related to trust in administration (*b* = .29, *p* < .01, 95% CI [.15, .42]). Hypothesis 1b was also supported, as the path between training comprehensiveness and trust in the administration was positive and significant (*b* = .59, *p* < .01, 95% CI [.42, .74]). We also found support for Hypothesis 2: trust in administration



**Figure 2.** Interaction between trust and prosocial motivation on service quality.

was positively and significantly related to service quality ( $b = .17, p = .05, 95\% \text{ CI } [.02, .36]$ ). Hypotheses 3a and 3b predicted that trust in the administration would mediate the relationships between staffing sufficiency and training comprehensiveness, respectively, with service quality. We found support for these hypotheses as well. The indirect effect of staffing sufficiency on service quality through trust in the administration was significant (indirect effect =  $.05, 95\% \text{ CI } [.01, .13]$ ), supporting Hypothesis 3a. In addition, the indirect effect of training comprehensiveness on service quality through trust in the administration was significant (indirect effect =  $.10, 95\% \text{ CI } [.01, .21]$ ), so Hypothesis 3b was supported in this study.

For the second step recommended by Edwards and Lambert (2007), we estimated the second-stage moderated mediation regression equations (Model 3). We then estimated indirect effects at high (+1 SD), moderate (mean), and low (−1 SD) standard deviation levels of prosocial motivation (i.e., moderator), and tested their significance using bias-corrected bootstrapped 95% CIs (Shrout & Bolger, 2002). Hypothesis 4 predicted that prosocial motivation would moderate the relationship between trust in administration and service quality. As shown in Table 3, we found support for this hypothesis. The interaction between prosocial motivation and trust in administration on service quality was significant ( $b = .19, p < .05, 95\% \text{ CI } [.03, .34]$ ). Further insight into the direction of this conditional effect can be found in Fig. 2. As shown in the figure, there is a positive relationship between trust in administration and service quality for employees with high prosocial motivation (simple slope =  $.31, p < .01$ ), but that relationship is not significant for employees with low prosocial motivation (simple slope =  $-.04, p = .72$ ). This result is consistent with the indirect effects reported in Table 3. Specifically, the conditional indirect effects of staffing sufficiency on service quality through trust in administration at different levels of prosocial motivation reflect that the indirect effects are significant at high levels of prosocial motivation (indirect effect =  $.09, 95\% \text{ CI } [.03, .19]$ ) and moderate levels of prosocial motivation (indirect effect =  $.04, 95\% \text{ CI } [.002, .11]$ ). The conditional indirect effects of training comprehensiveness on service quality through trust in administration at different levels of prosocial motivation reflect that the indirect effects are significant only at high levels of prosocial motivation (indirect effect =  $.17, 95\% \text{ CI } [.05, .32]$ ). Therefore, Hypothesis 4 was supported.

Finally, the Edwards and Lambert (2007) method allows researchers to compare the hypothesized model and alternative nested models to provide further support for our overall hypothesized second-stage moderated mediation model and rule out any potential that prosocial motivation is moderating the relationship between our independent variables and our mediator, in addition to moderating the relationship between trust in administration and service quality. The generalized  $R^2$ ,  $Q$ , and  $W$  statistics were computed to allow us to compare several models to pinpoint where moderation is primarily taking place in the model (Models that contain more than one variable being predicted

[i.e., mediation] in a path model can be compared by computing generalized  $R^2$ ,  $Q$ , and  $W$  statistics. A model with a higher generalized  $R^2$  and a significant  $W$  statistic explains more variance than the model to which it is being compared, meaning that a statistically significant  $W$  statistic shows that the more restricted model is explaining significantly more variance [Tepper *et al.*, 2008] (Tepper, Henle, Lambert, Giacalone, & Duffy, 2008). Specifically, we compared our hypothesized second-stage moderation model (Model 3) and an alternative first-stage moderation model (Model 2) with a total effects model (Model 4).

As shown in Table 3, the total effects model, Model 4, ( $R^2_{\text{Generalized}} = .66$ ), explains significantly more variance than the simple mediation model, Model 1, ( $R^2_{\text{Generalized}} = .58$ ,  $W = 22.36$ ,  $p < .001$ ), and significantly more variance than the first-stage moderated mediation model, Model 2, ( $R^2_{\text{Generalized}} = .61$ ,  $W = 15.16$ ,  $p < .001$ ). This means that having both first- and second-stage moderation in the model creates a significantly better model than having no moderation or only first-stage moderation. However, the total effect model does not explain significantly more variance than our hypothesized second-stage moderated mediation model, Model 3, ( $R^2_{\text{Generalized}} = .63$ ,  $W = 9.59$ , n.s.), showing that adding first-stage moderation (to create a total effects model) does not significantly improve the second-stage moderation model, which provides further evidence for our hypothesized model. Finally, it is worth noting that in the first-stage moderation model, neither interaction was significant (staffing sufficiency  $\times$  prosocial motivation:  $b = .10$ ,  $p = .26$ ; training  $\times$  prosocial motivation:  $b = -.02$ ,  $p = .89$ ). Therefore, we can be confident that the moderation is taking place only in the second half of our model.

### Study 2 discussion

In Study 2, we find full support for the mediating relationships, including the role of training comprehensiveness, which was not significant with firefighters. With police officers, we find that staffing sufficiency and training comprehensiveness are positively associated with trust in administration and service quality. It may be that in the uncertain and self-directed, sometimes isolating nature of policing, police officers require additional training and staffing support for heightened associations of trust and service quality. It is also possible that the team-based approach used in firefighting leads to more informal on-the-job training (OJT) than that which is available to police officers. We also find support for the value of high levels of prosocial motivation and high trust in administration such that the combination of both of these leads to heightened associations with police officer service quality. Our second study demonstrates the value of high prosocial motivation in police officers' service quality in addition to the other resources. Police officers report a stronger positive association with quality of service if they have enough resources (staffing and training) provided to them. However, police report the highest service quality in the presence of trust in the administration and prosocial motivation. Thus, trust in the administration and prosocial motivation appear to amplify the value of organizational resources to police officer service quality.

### General discussion

The overall study results provide meaningful implications for understanding what resources are necessary for PSPs provision of quality service for the communities they serve and how organizational resources impact service quality distinctly. First, when considering the organizational resources that are important in the study's context, our findings suggest that staffing sufficiency is a critical need for both firefighters and police officers. Extending earlier research that reported the need for the administration to align sufficient staffing levels with the volume of emergency-related calls (McCabe & O'Connell, 2017), we find that sufficient staffing is associated with firefighters and police officers' positive reports of service quality. The role of trust in the administration existed as a positive and novel link that heightened service quality for both departments. This finding extends earlier research showing the value of staffing sufficiency to employee performance in non-emergency job

roles (Hudson & Shen, 2015, 2018) through heightened levels of trust in administrators by employees in risky job roles. As previously stated, by introducing trust in administration as a mediator, we contribute to the management literature and extend what we know about the reciprocity of resource exchange in SET to further explain the role of employee trust toward the administration in the relationship between organizational resources and service quality.

We posit our findings augment SET's capacity to explain and provide more accurate insights about the dynamics of exchange relationships (Cropanzano et al., 2017) in several areas. First, we identified the value of multiple overlapping constructs for initiating behavioral action and targeting specific behavioral predictions. Namely, we found that administration's provision of sufficient staffing and training comprehensiveness was associated with PSPs' positive perceptions of trust in administration. Second, we reported how PSPs' individual resources, particularly their prosocial motivation, served as an additional principle of reciprocity in their relationship between trust perceptions and improved service quality. Third, we find that police officers' prosocial motivation is beneficial to their service quality effectiveness in a dangerous job context, expanding our understanding of exchange relationships across various settings and different resources (e.g., Brunetto et al., 2020; De Jong & Dirks, 2012; Dirks & Ferrin, 2002; Schaubroeck, Peng, & Hannah, 2013). In sum, our study investigated how administrations' provision of sufficient staffing and training influences PSPs' trust perceptions, in combination with employees' prosocial motivation, to ultimately impact service effectiveness.

Through our findings, we extend SET to show the nuanced pathways of initiating actions of resource exchanges that enhance service quality in the public safety sector (Cropanzano et al., 2017). Our findings extend previous research that investigated how initiating actions evoked positive affect (i.e., trust) to influence individual citizenship behaviors (Aryee et al., 2002) and how perceptions of management support increased employee engagement in several contexts (Brunetto et al., 2020). Our findings, specific to trust perceptions, suggested that when firefighters and police officers feel that they possess adequate support from their administrators, they respond with increased levels of trust in the administration, which ultimately results in higher levels of quality service provided to the community. Furthermore, our study identified two distinct resources, staffing sufficiency and training comprehensiveness, as positive predictors of PSPs' trust in administration, which initiated enhanced service quality through trust. Notably, the requisite resources, however, appeared to be different for firefighters and police officers. The findings of Study 2 supported the importance of training comprehensiveness for police officers only. This result suggests that the police officers' responsibilities of preventing, investigating, and stopping crime in a highly ambiguous and dangerous job role (e.g., Brandl & Strohshine, 2013; Yarwood, 2015) may increase police officers' perceived training needs, a need that may be driven by the solo nature of police officers' job roles (Farr-Wharton et al., 2021). In contrast, the nonsignificant finding of training comprehensiveness for firefighters may suggest that they rely on their teams in crisis events or feel better prepared given their daily training in the firehouse (e.g., weight and cardiovascular, equipment checks).

The role of trust in administration emerged as a vital resource to employees' positive service quality in both departments, and the mediating role of trust in administration between staffing sufficiency and positive service quality was fully supported in both samples. The reported association between trust in administration and positive service quality extends earlier work that depicts the importance of a leader's trust for firefighters (e.g., Perry & Mankin, 2007; Sedlmeyer & Dwyer, 2018) to also include the value of administrative trust to police officers. The influence of perceived reciprocity between administrator trust and PSPs' service quality found in this study moves beyond earlier research that links leadership style, namely transformational leadership or service leadership, with police officer commitment and turnover (Brunetto, Teo, Shacklock, Farr-Wharton, & Shriberg, 2017; Schaubroeck, Lam, & Peng, 2011) to demonstrate a positive association with employee service quality. Moreover, this study responds to the call for understanding the reciprocity of trust between leaders and employees in different contexts (Reiche et al., 2014).

Beyond a focus on the value of organizational resources, our study is the first known to highlight the importance of police officers' prosocial motivation to heightened service quality. We find that



prosocial motivation appears to amplify police officers' quality service provision. It may be that prosocial motivation is a critical resource in softening the current view in some countries of police officers' public image as being impersonal, psychologically cruel, and even physically violent (e.g., Jobson & Schneck, 1982; Van Craen, 2013). Officers' prosocial motivation may, instead, increase citizens' perspectives of positive service quality. The value of high levels of prosocial motivation to police officers is perhaps even more valuable given that a considerable portion of a police officer's job moves beyond crime prevention and thus requires officers to frequently help community members with social and emotional challenges (Hawdon, 2008; Zhao, Lovrich, & Thurman, 1999). Context should be considered when examining public sector organizations (Hupe & Buffat, 2014). It is essential to acknowledge the differing demands on police officers and firefighters during crises. While police officers often find themselves working independently with heightened levels of discretion (Farr-Wharton *et al.*, 2021), firefighters may rely on their teams for support in such situations. Indeed, the team-based nature of firefighting demands a significant amount of OJT in real-time scenarios. Future research should examine such distinctions.

### *Managerial implications*

The findings of this study have several important managerial implications for PSPs and administrators in charge of resource allocation. While municipal resources to enhance public safety may be limited, chiefs need to be aware of the importance of sufficient staffing, as well as training comprehensiveness, and how this can impact service quality. Indeed, this study reinforces previous research emphasizing the need for aligning staffing levels with the volume of emergency-related calls (Gurvich *et al.*, 2010). It is important for administrators in other crisis-oriented service industries (e.g., healthcare) to recognize how staffing at appropriate levels heightens trust, which in turn improves service quality. To further enhance service quality, administrators should focus on fostering trust in the administration, as our findings suggest that trust serves as a fundamental driver in shaping positive service outcomes. This may be improved by providing adequate job resources, transparent communication, and fair treatment, as well as opportunities for employee participation and involvement in decision-making processes.

In addition, our study highlights the importance of comprehensive training programs for police officers. By investing in training that addresses the specific challenges and demands of dangerous and emotionally demanding job roles, administrators can empower employees with the necessary knowledge, skills, and abilities to perform their jobs more effectively. We find that training comprehensiveness is especially important in more solo, isolated job roles. Future research should distinguish between training types. For instance, an emerging research stream indicates that virtual reality training implemented in police academies offers a more effective approach to prepare officers, potentially decreasing instances of racialized police violence, and, concurrently, benefiting both law enforcement and the communities they serve (Alanis & Pyram, 2022).

In consideration of the nonsignificant findings of training comprehensiveness for firefighters, it may be that the team-oriented nature and the reduced frequency of emergency calls (Fry, Magazine, & Rao, 2006) attenuate their reliance upon administration for formalized training resources. In this team-oriented job environment, earlier research suggests that firefighters need more training to prepare for the life-threatening conditions of a structural fire, complete routine training to meet physical fitness job requirements, and maintain equipment and vehicles (e.g., Boyce *et al.*, 2008; Junyoul, Taeli, & Jungmin, 2017). Our findings may suggest that other factors such as tenure, high-performing teams, or immediate supervisors may matter more than training comprehensiveness. Future research should delve deeper into understanding the underlying mechanisms and boundary conditions that reinforce or substitute for training programs in critical contexts.

Lastly, our findings suggest that administration should consider the role of prosocial motivation among police officers. We found that police officers' prosocial motivation amplifies the relationship between trust in administration and service quality. We recommend that administrators should

leverage and nurture this prosocial motivation by creating a supportive work environment that recognizes and values the altruistic drive of police officers. By promoting a culture of prosocial values and acknowledging the positive impact of prosocial motivation, administrators can harness its potential to enhance service quality. Moving beyond individual differences, investigating how team dynamics, such as cohesion, collaboration, and shared goals, contribute to or substitute for prosocial orientations would provide valuable insights.

### Limitations and future research

As with all research, our work is not without limitations. First, due to the logistical challenges of collecting data from public protective service personnel in multiple regions, our findings were obtained from the fire department and police department in a single city. It is possible that different cities with dissimilar sizes, economic resources, and cultures may have police officers and firefighters who think and behave in a consistently different manner than the participants in our studies. Future research should test this model in other locations (e.g., very large cities, different regions of the country, or with other international municipalities). However, we can gain some reassurance of generalizability from the fact that our model was tested using two distinct public protective service occupations (firefighters and police officers), and we found consistent results for the majority of the relationships in our model.

In addition, our findings in Study 1 and 2 rely on self-report data from PSPs. As such, we cannot rule out the possibility of self-report bias in our results. Future research should seek to replicate the results of Study 1 and 2 by using objective performance measurements. Lastly, our variables of interest, inductively derived from the coauthors' interactions with the department chiefs, identify the value of staffing and training on perceived administrative trust. Future research should consider other organizational resources that might positively influence public protective officers' service quality. Similarly, our focus on prosocial motivation is limited to the examination of a psychological resource, namely prosocial motivation. Future research should examine the role of intentional hiring and training practices designed for identifying and developing prosocial motivation, respectively. Research should also examine the value of prosocial motivation in other public safety departments and other crisis-oriented service roles.

In addition, examining different cultural and organizational settings and job roles where prosocial behavior is crucial would shed light on the generalizability and applicability of these findings. Given that the majority of our sample were male employees, future research should specifically examine the impact of team environments on our proposed relationships for women. Understanding potential gender variations in our proposed relationships would contribute to a more comprehensive understanding of how team environments shape trust in administration and service quality across different populations. Future research should also account for other personal capabilities (e.g., personality and team support) that may also serve as a personal resource for success in such physically and emotionally demanding job roles. Finally, future research should compare our findings to other countries to account for the effects of context such as institutional design, relationships, and political cultures (Hupe & Buffat, 2014).

### References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60(1), 451–474.
- Alanis, J. M., & Pyram, R. H. (2022). From simulations to real-world operations: Virtual reality training for reducing racialized police violence. *Industrial and Organizational Psychology*, 15(4), 621–625.
- Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(3), 267–285.
- Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2016). Developing and leveraging human capital resource to promote service quality: Testing a theory of performance. *Journal of Management*, 42(2), 480–499.

- Bacharach, S., Bamberger, P., & Doveh, E. (2008). Firefighters, critical incidents, and drinking to cope: The adequacy of unit-level performance resources as a source of vulnerability and protection. *Journal of Applied Psychology, 93*(1), 155–169.
- Baer, M. D., Dhensa-Kahlon, R. K., Colquitt, J. A., Rodell, J. B., Outlaw, R., & Long, D. M. (2015). Uneasy lies the head that bears the trust: The effects of feeling trusted on emotional exhaustion. *Academy of Management Journal, 58*(6), 1637–1657.
- Baka, L. (2020). Types of job demands make a difference. Testing the job demand-control-support model among Polish police officers. *The International Journal of Human Resource Management, 31*(18), 2265–2288.
- Balkin, D. B., & Richebé, N. (2007). A gift exchange perspective on organizational training. *Human Resource Management Review, 17*(1), 52–62.
- Bigley, G. A., & Roberts, K. H. (2001). The incident command system: High-reliability organizing for complex and volatile task environments. *Academy of Management Journal, 44*(6), 1281–1299.
- Blau, P. (1964). *Exchange and power in social life*. New York: Routledge.
- Boyce, R. W., Ciulla, S., Jones, G. R., Boone, E. L., Elliott, S. M., & Combs, C. S. (2008). Muscular strength and body composition comparison between the Charlotte-Mecklenburg fire and police departments. *International Journal of Exercise Science, 1*, 125–135.
- Brandl, S. G., & Strohshine, M. S. (2013). The role of officer attributes, job characteristics, and arrest activity in explaining police use of force. *Criminal Justice Policy Review, 24*(5), 551–572.
- Brower, H. H., Lester, S. W., Korsgaard, M. A., & Dineen, B. R. (2009). A closer look at trust between managers and subordinates: Understanding the effects of both trusting and being trusted on subordinate outcomes. *Journal of Management, 35*(2), 327–347.
- Brunetto, Y., & Beattie, R. (2020). Changing role of HRM in the public sector. *Public Management Review, 22*(1), 1–5.
- Brunetto, Y., Farr-Wharton, B., Farr-Wharton, R., Shacklock, K., Azzopardi, J., Saccon, C., & Shriberg, A. (2020). Comparing the impact of management support on police officers' perceptions of discretionary power and engagement: Australia, USA and Malta. *The International Journal of Human Resource Management, 31*(6), 738–759.
- Brunetto, Y., Farr-Wharton, B., Wankhade, P., Saccon, C., & Xerri, M. (2023). Managing emotional labour: The importance of organisational support for managing police officers in England and Italy. *The International Journal of Human Resource Management, 34*(4), 832–854.
- Brunetto, Y., Shacklock, K., Teo, S., & Farr-Wharton, R. (2014). The impact of management on the engagement and well-being of high emotional labour employees. *The International Journal of Human Resource Management, 25*(17), 2345–2363.
- Brunetto, Y., Teo, S., Shacklock, K., Farr-Wharton, R., & Shriberg, A. (2017). The impact of supervisor-subordinate relationships and a trainee characteristic upon police officer work outcomes. *Journal of Management & Organization, 23*(3), 423–436.
- Brunetto, Y., Xerri, M., & Farr-Wharton, B. (2022). Doing better with less: Do behavioural capabilities affect street level bureaucrats' ability to deliver public value? *Public Management Review, 1*–20. In press.
- Bureau of Labor Statistics (2019). Retrieved March 20, 2023, from <https://www.bls.gov/oooh/protective-service/firefighters.htm#tab-2>
- Chang, P. L., & Chen, W. L. (2002). The effect of human resource management practices on firm performance. Empirical evidence from high-tech firms in Taiwan. *International Journal of Management, 19*, 622–631.
- Cheatham, A. & Maizland, L. (2022, March 29). How police compare in different democracies. *Council on Foreign Relations*. Retrieved from <https://www.cfr.org/backgroundunder/how-police-compare-different-democracies>
- Colquitt, J. A., LePine, J. A., Zapata, C. P., & Wild, R. E. (2011). Trust in typical and high-reliability contexts: Building and reacting to trust among firefighters. *Academy of Management Journal, 54*(5), 999–1015.
- Courtright, S. H., Colbert, A. E., & Choi, D. (2014). Fired up or burned out? How developmental challenge differentially impacts leader behavior. *Journal of Applied Psychology, 99*(4), 681–696.
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals, 11*(1), 479–516.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874–900.
- De Jong, B. A., & Dirks, K. T. (2012). Beyond shared perceptions of trust and monitoring in teams: Implications of asymmetry and dissensus. *Journal of Applied Psychology, 97*(2), 391–406.
- Dirks, K. T. (2000). Trust in leadership and team performance: Evidence from NCAA basketball. *Journal of Applied Psychology, 85*(6), 1004–1012.
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science, 12*(4), 450–467.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology, 87*(4), 611–628.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*(1), 1–22.
- Ehrhardt, K., Miller, J. S., Freeman, S. J., & Hom, P. W. (2011). An examination of the relationship between training comprehensiveness and organizational commitment: Further exploration of training perceptions and employee attitudes. *Human Resource Development Quarterly, 22*(4), 459–489.

- Ehrhart, K. H., Witt, L. A., Schneider, B., & Perry, S. J. (2011). Service employees give as they get: Internal service as a moderator of the service climate–service outcomes link. *Journal of Applied Psychology*, 96(2), 423–431.
- Ellis, J., & McGovern, A. (2016). The end of symbiosis? Australia police–media relations in the digital age. *Policing and Society*, 26(8), 944–962.
- Fagan, J., & Ployhart, R. E. (2015). The information processing foundations of human capital resources: Leveraging insights from information processing approaches to intelligence. *Human Resource Management Review*, 25(1), 4–11.
- Fallik, S. W., Deuchar, R., Crichlow, V. J., & Hodges, H. (2020). Policing through social media: A qualitative exploration. *International Journal of Police Science & Management*, 22(2), 208–218.
- Farr-Wharton, B., Brunetto, Y., Hernandez-Grande, A., Brown, K., & Teo, S. (2022). Emergency service workers: The role of policy and management in (re)shaping wellbeing for emergency service workers. *Review of Public Personnel Administration*, 1.
- Farr-Wharton, B., Brunetto, Y., Wankhade, P., Saccon, C., & Xerri, M. (2021). Comparing the impact of authentic leadership on Italian and UK police officers' discretionary power, well-being and commitment. *Policing: An International Journal*, 44(5), 741–755.
- Fry, M. J., Magazine, M. J., & Rao, U. S. (2006). Firefighter staffing including temporary absences and wastage. *Operations Research*, 54(2), 353–365.
- Ganster, D. C., & Dwyer, D. J. (1995). The effects of understaffing on individual and group performance in professional and trade occupations. *Journal of Management*, 21(2), 175–190.
- Golembiewski, R. T., & Kim, B. S. (1990). Burnout in police work: Stressors, strain, and the phase model. *Police Stud.: Int'l Rev. Police Studies*, 13, 74–80.
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48–58.
- Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, 54(1), 73–96.
- Grant, A. M., & Sumanth, J. J. (2009). Mission possible? The performance of prosocially motivated employees depends on manager trustworthiness. *Journal of Applied Psychology*, 94(4), 927–944.
- Greer, C. R., Carr, J. C., & Hipp, L. (2016). Strategic staffing and small-firm performance. *Human Resource Management*, 55(4), 741–764.
- Gurvich, I., Luedtke, J., & Tezcan, T. (2010). Staffing call centers with uncertain demand forecasts: A chance-constrained optimization approach. *Management Science*, 56(7), 1093–1115.
- Hällgren, M., Rouleau, L., & De Rond, M. (2018). A matter of life or death: How extreme context research matters for management and organization studies. *Academy of Management Annals*, 12(1), 111–153.
- Hawdon, J. (2008). Legitimacy, trust, social capital, and policing styles: A theoretical statement. *Police Quarterly*, 11(2), 182–201.
- Henderson, N. D., Berry, M. W., & Matic, T. (2007). Field measures of strength and fitness predict firefighter performance on physically demanding tasks. *Personnel Psychology*, 60(2), 431–473.
- Henderson, A., & Charbonneau, E. (2016). An examination of emergency services research in Public Administration. *Public Administration Quarterly*, 40(3), 559–588.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421.
- Hudson, C. K., & Shen, W. (2015). Understaffing: An under-researched phenomenon. *Organizational Psychology Review*, 5(3), 244–263.
- Hudson, C. K., & Shen, W. (2018). Consequences of work group manpower and expertise understaffing: A multilevel approach. *Journal of Occupational Health Psychology*, 23, 85–98.
- Hu, J., & Liden, R. C. (2015). Making a difference in the teamwork: Linking team prosocial motivation to team processes and effectiveness. *Academy of Management Journal*, 58(4), 1102–1127.
- Hupe, P., & Buffat, A. (2014). A public service gap: Capturing contexts in a comparative approach of street-level bureaucracy. *Public Management Review*, 16(4), 548–569.
- Jobson, J. D., & Schneck, R. (1982). Constituent views of organizational effectiveness: Evidence from police organizations. *Academy of Management Journal*, 25(1), 25–46.
- Junyoul, C., Taeil, K., & Jungmin, P. (2017). Effects of aquatic training on the job related physical fitness and pulmonary function on fire fighters in Korea. *International Journal of Crisis & Safety*, 2, 1–8.
- Kane, R. L., Shamlivan, T. A., Mueller, C., Duval, S., & Wilt, T. J. (2007). The association of registered nurse staffing levels and patient outcomes: Systematic review and meta-analysis. *Medical Care*, 45(12), 1195–1204.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of management journal*, 37(3), 656–669.
- Ladd, D., & Henry, R. A. (2000). Helping Coworkers and helping the organization: The role of support perceptions, exchange ideology, and conscientiousness 1. *Journal of Applied Social Psychology*, 30(10), 2028–2049.
- Lambooj, M., Flache, A., Sanders, K., & Siegers, J. (2007). Encouraging employees to co-operate: The effects of sponsored training and promotion practices on employees' willingness to work overtime. *International Journal of Human Resource Management*, 18(10), 1748–1767.

- Liao, H., Toya, K., Lepak, D. P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology, 94*(2), 371–391.
- Liebermann, S., & Hoffmann, S. (2008). The impact of practical relevance on training transfer: Evidence from a service quality training program for German bank clerks. *International Journal of Training and Development, 12*(2), 74–86.
- Lievens, F., De Corte, W., & Westerveld, L. (2015). Understanding the building blocks of selection procedures: Effects of response fidelity on performance and validity. *Journal of Management, 41*(6), 1604–1627.
- Lindberg, O., & Rantatalo, O. (2015). Competence in professional practice: A practice theory analysis of police and doctors. *Human Relations, 68*(4), 561–582.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*(2), 151–173.
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods, 18*(3), 285–300.
- Malone, M. F. T., & Dammert, L. (2021). The police and the public: Policing practices and public trust in Latin America. *Policing and Society, 31*(4), 418–433.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709–734.
- Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal, 48*(5), 874–888.
- McCabe, J. E., & O'Connell, P. E. (2017). Factors related to police staffing. *International Journal of Humanities and Social Science Review, 3*(6), 1–14.
- McCarthy, J. M., Trougakos, J. P., & Cheng, B. H. (2016). Are anxious workers less productive workers? It depends on the quality of social exchange. *Journal of Applied Psychology, 101*(2), 279–271.
- McFarland, L. A., Ryan, A. M., Sacco, J. M., & Kriska, S. D. (2004). Examination of structured interview ratings across time: The effects of applicant race, rater race, and panel composition. *Journal of Management, 30*(4), 435–452.
- McGovern, A., & Phillips, N. D. (2017). Police, media, and popular culture. In H. Pontell (Ed.), *Oxford Research Encyclopedia of Criminology and Criminal Justice*. New York, NY: Oxford University Press.
- Meglino, B. M., & Korsgaard, A. (2004). Considering rational self-interest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology, 89*(6), 946–959.
- Method, J. R., Lepine, J. A., Podsakoff, N. P., & Christian, J. S. (2016). Are workplace friendships a mixed blessing? Exploring tradeoffs of multiplex relationships and their associations with job performance. *Personnel Psychology, 69*(2), 311–355.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnitsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior, 61*(1), 20–52.
- Mission Square Research Institute. 2023. *Issue Brief: State and Local Government Employment Trends, 2023*. Retrieved August 2, 2023, from <https://research.missionsq.org/resources/state-and-local-government-employment-trends-2023>
- Ng, T. W. (2016). Embedding employees early on: The importance of workplace respect. *Personnel Psychology, 69*(3), 599–633.
- Noblet, A., Maharee-Lawler, S., & Rodwell, J. (2012). Using job strain and organizational justice models to predict multiple forms of employee performance behaviours among Australian policing personnel. *The International Journal of Human Resource Management, 23*(14), 3009–3026.
- O'Connor, C. D. (2017). The police on Twitter: Image management, community building, and implications for policing in Canada. *Policing and Society, 27*(8), 899–912.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*, 12–40.
- Paulsen, H. F. K., & Kauffeld, S. (2017). Linking positive affect and motivation to transfer within training: A multilevel study. *International Journal of Training and Development, 21*(1), 35–52.
- Perry, R. W., & Mankin, L. D. (2007). Organizational trust, trust in the chief executive and work satisfaction. *Public Personnel Management, 36*(2), 165–179.
- Ployhart, R. E. (2006). Staffing in the 21st century: New challenges and strategic opportunities. *Journal of Management, 32*(6), 868–897.
- Pratt, M. G., Lepisto, D. A., & Dane, E. (2019). The hidden side of trust: Supporting and sustaining leaps of faith among firefighters. *Administrative Science Quarterly, 64*(2), 398–434.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*(1), 185–227.
- Purba, A., & Demou, E. (2019). The relationship between organisational stressors and mental wellbeing within police officers: A systematic review. *BMC Public Health, 19*(1), 1–21.
- Reiche, B. S., Cardona, P., Lee, Y.-T., Canela, M. Á., Akinnukawe, E., Briscoe, J. P., ... Wilkinson, H. (2014). Why do managers engage in trustworthy behavior? A multi-level cross-cultural study in 18 countries. *Personnel Psychology, 67*(1), 61–98.
- Ricciardelli, R., Czarnuch, S., Carleton, R. N., Gacek, J., & Shewmake, J. (2020). Canadian public safety personnel and occupational stressors: How PSP interpret stressors on duty. *International Journal of Environmental Research and Public Health, 17*(13), 4736–4752.

- Rich, G. A. (1997). The sales manager as a role model: Effects on trust, job satisfaction, and performance of salespeople. *Journal of the Academy of Marketing Science*, 25(4), 319–328.
- Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of business research*, 62(10), 1027–1030.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Russell, E. K. (2018). Carceral pride: The fusion of police imagery with LGBTI rights. *Feminist Legal Studies*, 26(3), 331–350.
- Schaubroeck, J., Lam, S. S., & Peng, A. C. (2011). Cognition-based and affect-based trust as mediators of leader behavior influences on team performance. *Journal of Applied Psychology*, 96(4), 863–871.
- Schaubroeck, J. M., Peng, A. C., & Hannah, S. T. (2013). Developing trust with peers and leaders: Impacts on organizational identification and performance during entry. *Academy of Management Journal*, 56(4), 1148–1168.
- Scholarios, D., Hesselgreaves, H., & Pratt, R. (2017). Unpredictable working time, well-being and health in the police service. *The International Journal of Human Resource Management*, 28(16), 2275–2298.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management review*, 32(2), 344–354.
- Sedlmeyer, L. R., & Dwyer, R. J. (2018). Fire officer leadership strategies for cost management. *Disaster Prevention and Management: An International Journal*, 27(5), 495–507.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–425.
- Sitzmann, T., & Weinhardt, J. M. (2018). Training engagement theory: A multilevel perspective on the effectiveness of work-related training. *Journal of Management*, 44(2), 732–756.
- Spence, M. (1978). Job market signaling. *Uncertainty in Economics*, 87(3), 281–306.
- Tepper, B. J., Henle, C. A., Lambert, L. S., Giacalone, R. A., & Duffy, M. K. (2008). Abusive supervision and subordinates' organization deviance. *Journal of Applied Psychology*, 93(4), 721–732.
- Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P., & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42(2), II-57-II-66.
- Van Craen, M. (2013). Explaining majority and minority trust in the police. *Justice Quarterly*, 30(6), 1042–1067.
- Van Gelderen, B. R., Konijn, E. A., & Bakker, A. B. (2017). Emotional labor among police officers: A diary study relating strain, emotional labor, and service performance. *The International Journal of Human Resource Management*, 28(6), 852–879.
- Vecchio, R. P., & Sussman, M. (1981). Staffing sufficiency and job enrichment: Support for an optimal level theory. *Journal of Organizational Behavior*, 2(3), 177–187.
- Vila, B. (2006). Impact of long work hours on police officers and the communities they serve. *American Journal of Industrial Medicine*, 49(11), 972–980.
- Vila, B., Morrison, G. B., & Kenney, D. J. (2002). Improving shift schedule and work-hour related policies and practices to increase police officer performance, health, and safety. *Police Quarterly*, 5(1), 4–24.
- Wilson, J. M., & Grammich, C. A. (2009). Police recruitment and retention in the contemporary urban environment. In *Conference Proceedings*. Santa Monica, CA: RAND Corporation.
- Witt, L. A., & Broach, D. (1993). Exchange ideology as a moderator of the procedural justice-satisfaction relationship. *The Journal of Social Psychology*, 133(1), 97–103.
- Yarwood, R. (2015). Lost and hound: The more-than-human networks of rural policing. *Journal of Rural Studies*, 39, 278–286.
- Young, P. M., Partington, S., Wetherell, M. A., St Clair Gibson, A., & Partington, E. (2014). Stressors and coping strategies of UK firefighters during on-duty incidents. *Stress and Health*, 30(5), 366–376.
- Zhao, J. H., Lovrich, N. P., & Thurman, Q. (1999). The status of community policing in American cities: Facilitators and impediments revisited. *Policing: An International Journal of Police Strategies & Management*, 22(1), 74–92.
- Zhu, Y., & Akhtar, S. (2014). How transformational leadership influences follower helping behavior: The role of trust and prosocial motivation. *Journal of Organizational Behavior*, 35(3), 373–392.

**Dr. Carol Flinchbaugh** is a Professor of Management, and Robert O. Anderson Distinguished Professor at New Mexico State University. Dr. Flinchbaugh has several ongoing research projects focusing on the topics of employee responses to workplace demands, HR systems in the non-profit setting, and understanding generational differences in the workplace.

**Dr. Jennifer Miles** is an Assistant Professor of Management in the University of San Diego. Dr. Miles teaches courses in organizational behavior. Her research focuses on teams and group work, leadership, leader-member exchange, and ethical decision-making.

**Dr. Bahareh Javadizadeh** is an Assistant Professor of Management who specializes in Human Resource Management and Organizational Behavior. Her research explores the individual and organizational outcomes of perceived identity threat in the workplace, the creation of facades of conformity as a coping mechanism, and the buffering role of the climate of authenticity.

**Dr. Yanni Liang** received her PhD in Management from New Mexico State University. Her research is focused on strategy and sustainable firm performance.

**Dr. William Smith** is a retired Associate Professor at New Mexico State University. His research is focused on strategic management, strategic analysis, organizational theory, and business consulting.

---

**Cite this article:** Flinchbaugh, C., Miles, J., Javadizadeh, B., Liang, Y., and Smith, W. L. (2024). Examining firefighter and police officers' trust and service quality: What resources matter?. *Journal of Management & Organization*, 30(6), 2126–2148. <https://doi.org/10.1017/jmo.2023.69>