

Does Being a HERO Really Make a Positive Difference to Police Officer Street Level Bureaucrats' Well-Being?

Author

Xerri, Matthew J, Brunetto, Yvonne, Saccon, Chiara, Wankhade, Paresh

Published

2024

Journal Title

Public Administration Quarterly

Version

Accepted Manuscript (AM)

DOI

[10.1177/07349149241268571](https://doi.org/10.1177/07349149241268571)

Rights statement

This work is covered by copyright. You must assume that re-use is limited to personal use and that permission from the copyright owner must be obtained for all other uses. If the document is available under a specified licence, refer to the licence for details of permitted re-use. If you believe that this work infringes copyright please make a copyright takedown request using the form at <https://www.griffith.edu.au/copyright-matters>.

Downloaded from

<https://hdl.handle.net/10072/432175>

Griffith Research Online

<https://research-repository.griffith.edu.au>

**Does being a HERO really make a positive difference to police officer Street Level
Bureaucrats' well-being?**

Abstract

This study examines the extent to which being a HERO (i.e., Hope, Efficacy, Resilience, and Optimism) impacts police officer Street Level Bureaucrats (SLBs) operational and organizational stress, and their subsequent perceived well-being. The sample comprised 220 Italian and 228 English SLBs, and hypotheses were tested using the Analysis for Moment Structures (AMOS) v.27 Structural Equation Modelling software. The findings depict that HERO explains approximately a fifth of SLBs' organizational stress, and together, their variance accounted for approximately two-thirds of SLBs' well-being. Finally, as one personal psychological resource for helping police officers cope with stress in the workplace, the findings indicate a need to upskill SLBs in HERO to better negotiate bureaucratic processes without becoming more susceptible to negative stress-related outcomes.

Keywords: street-level bureaucrats, psychological capital, operational stress, organizational stress, employee well-being

In this paper, we examine the impact of personal psychological resources on the perceptions of stress and well-being for one group of Street Level Bureaucrats (SLBs) – police officers. SLBs are employees’ delivering services to the public under conditions where demand for services consistently exceeds supply. The implication for SLBs is that they are expected to decide which cohorts receive services and how much, rather than policy makers, which has the negative implication of shifting the burden - often referred to as discretion - about ‘who gets what’ from elected public officials to SLBs’ responsible for public service delivery (Brunetto, Xerri & Farr-Wharton, 2022; Lipsky, 1980). As such, SLBs are forced to negotiate the terrain between written policies (detailing the formal responsibilities of SLBs) and what is possible in practice with the available resources (Davidovitz et al., 2021) and this causes stress.

When resources are limited, as an example, police officers may have to choose between whether to respond to a potentially violent domestic violence situation or a school vandalism in progress. In many countries, both acts are unlawful, and police officers must decide which incident is given priority. Therefore, police officers must use their discretion to make decisions about what services different community groups receive and when they will receive them (Tummers & Bekkers, 2014; Davidovitz & Cohen, 2022), as well as which rules will be implemented and which will be “broken, bent, ignored, misinterpreted” (Bozeman, 2022, p.36).

SLBs regularly engage coping mechanisms that assist them to “...master, tolerate, or reduce external and internal demands and conflicts they face...” (Tummers, et al, 2015, p2). According to Loyens and Maesschalck (2010), three types of characteristics determine how SLBs’ cope in delivering services: individual, organizational and client factors and features. It is the way these factors interact that determines SLBs’ responses, although, Baviskar and Winter (2017) argue that individual characteristics play an important role in interpreting the impact of other factors, especially when organizational factors restrict the supply of resources. However, it is unclear how the dynamic interplay of these factors leads to specific SLBs’

behavior. Ewert Loer and Thomann (2021) argued for using theories from other disciplines in order to provide a more comprehensive understanding about SLBs' behavior because it impacts public policy outcomes.

For emergency services SLBs such as police officers, stress is derived from both administrative-bureaucratic processes causing organizational stress, as well as stress from the nature of police work (operational stress), which for example involves protecting victims of violence and apprehending perpetrators (Tuckey & Scott, 2014). Violanti et al. (2018, p. 272-280) summarize the main organizational stressors as inadequate funding, which then leads to insufficient staffing and poor equipment as well as inflexible hierarchical management structures which limit autonomy and empowerment. Within public administration scholarship, inadequate funding - such that demand exceeds supply - is termed the *public sector gap* (Hupe & Buffat, 2014). This is an issue for managing police officers, and Shane (2010) identified that the variance of organizational stress explained almost half of US police officers' performance.

Excessive stress is associated with several poor employee outcomes, for example, lower productivity and increased sickness for police officers in England (Cartwright & Roach, 2020) and lower proactive behavior and well-being for police officers in Australia (Keech et al., 2020). However, in an Australian context, Farr-Wharton et al. (2022) found that management practices can mediate the impact of distress on Australian emergency services SLBs (including police officers). Similarly, Violanti et al. (2018) argues that support from organizations and their management is a key strategy for mediating police stress. However, there may be other strategies that organizations could use to better support police officers.

One potential individual coping support available to SLBs (Loyens & Maesschalck, 2010) is their personal psychological resources, which have been shown to act as a barrier against stress. The psychological resources comprise: Hope, Efficacy, Resilience and

Optimism, and they combine to form the higher-order construct - Psychological Capital – also known as HERO because it comprises **H**ope (flexibility in goal achievement), **E**fficacy (self-efficacious), **R**esilience (the ability to rebound), and **O**ptimism (positivity) (Luthans et al., 2006). When HERO is evident, individuals likely demonstrate empowerment, which reduces their perception of stress and then increases their capacity to achieve their goals such as high performance (Luthans, Luthans, Youssef, & Avolio, 2007). HERO is more than simply being resilient; it is psychological capacity that offers a new way of perceiving and responding to an issue (Luthans, Norman & Avolio, 2008). Consequently, SLBs who have high levels of HERO, are argued to have built-in psychological (personal) resources making them somewhat immune to both operational and organizational stress and more likely to perform at a high level (Farr-Wharton et al., 2022).

Deoxyribonucleic acid (DNA) is responsible for approximately half of an individual's psychological resources, although, HERO is developmental, and consequently organizations can choose to develop these psychological resources via training (Luthans et al., 2007; Brunetto, Dick, Xerri & Cully, 2020). The value of HERO is that it offers organizations another strategy for upskilling employees as a tool for reducing organizational stress (Farr-Wharton et al., 2017; Brunetto et al., 2020a). Recent public administration scholarship has identified HERO to be a significant predictor and mediator of different types of SLBs' outcomes, including employee well-being, resilience, innovative behavior and public value (Brunetto et al., 2020a; 2022); stress (Brunetto et al., 2017); safety outcomes (Trincherro, Farr-Wharton & Brunetto, 2019), employee well-being (Adendorff, Dick, Xerri & Brunetto, 2021) and employee engagement (Dudau, Kominis & Brunetto, 2020; Brunetto et al., 2020b). Hence, the existing evidence depicts that maintaining and developing HERO is useful for organizations that want to provide employees with psychological resources to cope with stressful situations at work and alleviate the negative impact of their employees' stress.

Although the link between employee HERO and stress at work is established, to the best knowledge of the authors, it is unclear which type of stress – operational or organizational stress is most impacted by HERO, and which type of stress predominantly influences employee well-being. It may be that HERO is effective at alleviating only certain types of stress (Lupsa, Virga, Maricutoiu & Rusu, 2019). Street-level organizations (SLOs) need information about how to better support SLBs' ability to keep servicing the public effectively. In this study, we examine how HERO impacts operational and organizational stress within two international contexts: (1) Italian and (2) English police SLBs, and their subsequent well-being. The importance of examining the two distinct contexts is based in the transformation of public service management, referred to as New Public Management (NPM).

NPM refers to a reform of administrative and management practices in the public sector to bring their operations closer to the dynamics of the private sector, emphasizing efficiency, effectiveness, and customer service (Hood, 1991). More specifically, England is an example of a core NPM country, having implemented managerialism and performance management reforms. In contrast, Italy is an example of an NPM laggard, where they have been slower to implement reforms to management and administrative practices (Pollitt & Bouckaert, 2017). Examining each context provides more comprehensive evidence of how SLBs use resources to cope with stress and maintain their well-being within the different public management contexts. Such a study is important as police officers in both countries undertake similar operational tasks, and presumably have similar levels of stress from those operational tasks.

In this study, we examine how an individual factor, the personal coping resource – HERO - impacts police SLBs' operational and administrative-bureaucratic (organizational) stress, and their subsequent well-being in Italy and England using SLB (Lipsky, 1980) and Conservation of Resources (COR) (Hobfoll, 2011) theories. Whilst SLB theory explains the processes SLBs engage in as they negotiate their job tasks and provides some understanding of how coping

strategies impact SLBs' behavior in relation to clients (Tummers et al., 2015); COR theory provides a more comprehensive understanding about SLBs' psychological responses that impact their behavioral strategies to cope with workplace stress. Lavee (2021) suggests that SLBs make discretionary decisions to ration the limited resources available to deliver services to the public, and this study provides insight into the psychological interplay of factors informing their behavior, especially when facing chronic conditions of insufficient organizational resources. Therefore, COR theory can contribute to the SLB literature by explaining how SLBs use personal resources (e.g., HERO) to invest in coping with workplace stressors and to maintain other resources, such as SLBs well-being. Together, the theories provide a more comprehensive lens for examining SLBs' outcomes. The research questions guiding the study are:

RQ1: Does HERO impact organizational and operational stress and well-being for Italian and English police officers

RQ2: What are the similarities and differences in the way HERO impacts organizational and operational stress for Italian and English police officers?

The implications of the findings are a better understanding for SLOs about the different types of stress perceived by police officers, and from this knowledge, SLOs can make better choices about how to spend their finite training budgets. If HERO mediates the relationship between organizational stress and police officer well-being, then this would be an important contribution because Shane (2010; 2013, p. 30) has identified that it is the organizational stress especially from "rigid, often conflicting and opposing rules and regulations" and inadequate resourcing (Brough et al., 2016) that accounts for most of their stress.

Theoretical Frameworks and Hypotheses Development

Street Level Bureaucrats Theory

Studying the behavior of SLBs is gaining momentum within the public scholarship spectrum because it examines the grey area between policy and service delivery (Chang & Brewer, 2023). For this reason, examining SLBs is different from examining mainstream public administration because SLB behavior is a product of the norms, rules and regulations underpinning how they behave. Hence, the study of SLBs encompasses both traditional political science theories and scholars are increasingly using psychological theories to deepen the explanations of behavior, especially at the individual unit of analysis (Grimmelikhuijsen, Jilke, Olsen & Tummers, 2017). This allows for an expansion of the new subgroup area of ‘coping’ to be linked with the stress causing it (Olsen, Tummers, Grimmelikhuijsen & Jilke, 2018). It also allows for multiples lenses in examining and explaining how SLBs cope.

There are multiple perspectives about how rules and regulations impact SLBs. One perspective is that SLBs operate according to the rules in place and service who they can. Another perspective is that SLBs use workarounds to circumvent the impact of some rules in their attempts to service clients that they perceive as priorities (Bozeman et al., 2021). Baviskar and Winter (2017) argue that working conditions affect how SLBs behave, particularly when there is chronically inadequate resources and the work with the public involves ‘non-voluntary’ clients (such as criminals resisting arrest). For example, Farr-Wharton et al. (2022) found that Australian emergency services SLBs experienced psychological distress when constantly expected to negotiate intensively high workloads and difficult organizational processes. The result of such work conditions includes SLBs tending to use relatively common repertoires of coping strategies.

Research by Vink et al. (2015) argue that SLBs often face a moral dilemma, when they are expected to choose which client is most deserving. This results in one or more of the four types of conflict, including ‘policy–professional role conflict’ (where policy content differs from the professional SLBs’ values); ‘policy–client role conflict’ (demand for services exceeds supply); ‘organizational–professional role conflict’ (SLBs’ values conflicts with SLOs’ policy and resources); and ‘professional – client conflict’ (the SLBs’ values conflicts with the clients). These moral dilemmas are stressful for SLBs and, therefore, they make conscious and unconscious decisions about how to administer the limited public resources at their disposal, and when to administer them (Tummers et al., 2015; Jilke & Tummers, 2018). However, it is not clear how such decision-making impacts SLBs’ coping, and/or subsequent stress levels. COR theory explains how SLBs use the resources available to cope with workplace stressors, or how the lack of resources influences SLBs’ behavior. This is important because when SLBs’ behavior differs from organizational policies, these bureaucrats become even more crucial as individual policymakers. They modifications SLBs make to policy priorities is a discretionary response to practical challenges and constraints they encounter in their work environments, and SLBs personal psychological capacities are crucial in affecting how they make decisions and exercise their discretion (Baviskar and Winter, 2017). The public administration literature also indicates similarly to COR theory, the importance of SLBs personal psychological resources as a way of coping with the stress of delivering public services with limited resources.

Conservation of Resources theory

The basic underlying principle of COR theory, within an organizational context, is that SLBs will undertake activities that achieves or retains something they value (such as enhancing their well-being). On the other hand, to protect their health and well-being, humans are innately driven to avoid activities that they dislike, do not value, or that have the potential to deplete their existing resources, including work, social and personal resources (Hobfoll, 2011).

Although COR theory comprises several principles and corollaries, we argue that principle 1 and 2, and corollary 3 are the most relevant to our study. They are as follows: “Principle 1: Resource loss is disproportionately more salient than resource gain”, “Principle 2. People must invest resources in order to protect against resource loss, recover from losses, and gain resources”, and “Corollary 3: Those with greater resources are less vulnerable to resource loss and more capable of resource gain” (Hobfoll, 2018, p.106).

In practice, when police officers are constantly expected to work overtime, with high caseloads, they likely begin to experience factors associated with a loss of well-being, such as strain and burnout. The overtime and high caseloads create a work environment that is likely to deplete police officer resources, such as their psychological resources and sense of well-being. In particular, if each day an officer begins work with limited recovery time (less rest, recreation and sleep), those with greater access to resources will be less susceptible to further resource loss. However, according to Principle 1, the loss of resources associated with workplace stress is likely to have a greater effect on employee outcomes when compared with the resource gains.

As such, while police officers’ HERO is one personal resource where psychological capacity may be used to cope with organizational stressors, the influence of the stressors on employee well-being may be more salient than HERO. In addition, if employee HERO has been eroded over years of poor management (Xerri et al., 2020), continual overtime and high work harassment (Brunetto et al., 2015), employees will have fewer resources to draw upon, which may trigger a *loss spiral* and will likely generate further resource loss (Hobfoll et al., 2018, p. 106-7). A *loss spiral* involves a movement from an initial loss of resources to behavior likely to create further losses. For example, when a SLB is tired from continually being expected to work overtime, and continues to agree to work long hours, an initial erosion of

well-being is likely to trigger further losses of well-being, making such police officers vulnerable to increasing psychological distress (Farr-Wharton et al., 2022).

Alternatively, employees who are higher in HERO can invest their psychological resource as one approach to maintaining or developing their well-being, which is an example of resources existing in packs, not individually (i.e., these packs of resources are referred to as resource caravans) (Hobfoll, 2018). At a theoretical level, COR theory provides a lens for understanding the role of HERO for SLBs' in response to a workplace environment where operational and organizational stressors are related to depleted resources. The next section examines each of the study variables examined in this study.

Psychological Capital – Hope, Efficacy, Resilience, and Optimism (HERO)

As stated, psychological capital comprises “four psychological resources of hope, optimism, efficacy, and resilience”, and when employees have high HERO, performance is also high (Avey et al., 2011, p. 128). As Luthans et al. (2004) state, HERO builds on previous forms of capital, including “what you have” (economic capital), “what you know” (human capital), “who you know” (social capital), and instead is not just about “who you are,” but also “what you can become” with appropriate upskilling. Approximately half of person's HERO is attributable to DNA, although Doci et al., (2023) argue that this level can change depending on one's socio-demographic position because of ones' differing access to education, opportunities, influential networks and power, which means that some SLBs probably begin with more personal resources, such as HERO, and during their life they have greater scope for increasing it simply because of their societal standing.

However, organizations can also affect SLBs' HERO with the aim of increasing their natural buffer against stress (Avey et al., 2011). In particular, management practices – especially the quality of support offered by managers, as well as support from work peers and the quality of supportive organizational processes (such as access to training) affects whether

SLBs' psychological capital is enhanced or eroded over time (Xerri, Farr-Wharton & Brunetto, 2021). Training involves expanding an individual's cognitive attitudes and resources, by demonstrating how the way an individual perceives, feels and responds to a circumstance affects their outcomes (Luthans et al., 2007). Luthans et al. (2007) demonstrated significant increases in HERO from a singular training event. Lupsa et al. (2019) reviewed multiple intervention methodologies for upskilling HERO and found consistent significant positive effects, especially if the upskilling is contextually based. On the other hand, organizations that normalize high work intensity and harassment and permit micro-managing are likely to deplete employees' resources (Brunetto et al., 2022).

Stress

According to COR theory, stress occurs when:

“(a) when central or key resources are threatened with loss, (b) when central or key resources are lost, or (c) when there is a failure to gain central or key resources following significant effort” (Hobfoll et al., 2018, p. 103).

Policing literature has established that law enforcement is a stressful occupation (Violanti et al., 2017; Anshel, 2000; Anshel et al., 1997) but there is also a counter narrative arguing that police work is no more stressful than other groups such as ambulance workers (e.g., Wankhade et al., 2020, 2018; Granter et al., 2019) and that such stress is largely due to organizational factors rather than the police work itself. While focus on operational stressors has dominated the literature, a growing body of empirical research also suggests that changing workplace conditions is more likely to reduce employee stress (see Kukic et al., 2021; Finney et al., 2013; Morash et al., 2006; Shane, 2010; Schaubroeck, 1999; Fox et al., 1993).

Stress can be both operationally and organizationally (e.g., bureaucratically) derived. According to Purba and Demou (2019) who undertook a systematic review of research to examine stress in police officers, the stress that can manifest from exposure to job-related

danger and violence is not their main source of stress. Whilst the operational dimension of their job can heighten stress and anxiety, Purba and Demou (2019) found that it was the organizational stress that was more harmful because police officers perceive it as unnecessary, oppressive and unavoidable. Similarly, Violanti et al. (2018, p. 272) argue that "... the organizational setting or design (e.g., management-autonomy, flexibility, participation in decision making) may be a greater source of stress for police officers as they represent daily routines." Shane (2013, p. 30) found that the organizational stress came from the bureaucratic processes and hierarchical structures impacted "... the lowest members of the organization [because of the] rigid, often conflicting and opposing rules and regulations..." Also, Shane (2010) found that the variance of organizational stress explained almost half of police officers' performance.

Shane (2010) makes further distinction between such 'job content' or operational stressors and 'job context' or organizational stressors. Operational stressors arise from the nature of the police role itself such as shift work, operational overtime, court appearances, violent crime or terrorist attacks (Vila, 2000; Glasser, 1999). Organizational stressors relate to issues such as organizational culture and sub-cultures (Gutschmidt and Vera, 2022; Charman, 2017; Loftus, 2010; Waddington, 1999); organizational support (Brunetto et al., 2023); workplace related problems (Brown et al., 1996); negative interactions with co-workers (Wexler and Logan (1983). Tools for measuring policing stress due to operational and organizational stressors are also available and used in various studies (McCreary et al., 2017; Setti and Argentero, 2013; McCreary and Thompson, 2006).

Further, rules and bureaucracy are often associated with organizational related stress (Varker et al., 2023; Purba and Demou, 2019; Dick and Metcalfe, 2013). Excessive focus on rules, routines and formal norms is recognised as an "impediment to organisational effectiveness and to professional autonomy" (Shane, 2010, p. 808). Size of the police

departments have also shown to have implications on leadership and management styles, leading to inherently stressful behaviors in daily functions (Wuestewald and Steinheider, 2012; Shane, 2010; Reaiser, 1974). In their study of two police forces, Domingues and Machado (2017:657) address police organizations as ‘loosely coupled’ (anarchic organized) systems rather than ‘tightly coupled’ (bureaucratic) systems arguing that the loosely coupled factors that emerge inside bureaucratic organizations cause significant stress among officers calling for further research to analyze the fallacious nature of the recursive attribution of police stress to bureaucratic characteristics.

Such a distinction between organizational and operational stress is both valuable and relevant for the study findings as it highlights that sources of stress emanate equally from operational and organisational factors and why the source of stress, rather than just the degree of stress is also important. Such an approach is also supported in the literature (McCreary et al., 2017; Pindek and Spector, 2016; Shane, 2010).

In support of COR theory, Farr-Wharton et al. (2017) found that those higher in resources, such as HERO, appeared less vulnerable to resource loss, as HERO was negatively associated with stress for police officers in the USA. However, Farr-Wharton et al. (2017) did not differentiate between operational or organizational stress. We, therefore, add to the existing evidence by examining the impact of HERO on operational and organizational stress. Consequently, the following hypotheses are examined:

H1 High HERO is associated with low operational stress.

H2 High HERO is associated with low organizational stress.

Past research shows that organizational stress is derived from poor bureaucratic procedures (Moynihan & Pandey, 2007; Brunetto et al., 2017) - coupled with consistent under-funding and the normalization of high workloads (Purba & Demou, 2019; Farr-Wharton et al., 2022). Such stress impacts SLBs in two ways. It firstly compounds the negative impact of operational stress

because there are less SLBs to service the public (Farr-Wharton et al., 2016; 2021), which secondly amplifies the influence on organizational stress (Cartwright & Roach, 2020), such as negative interactions with co-workers. Hence, we propose the following hypothesis:

H3 High operational stress is associated with high organizational stress.

Employee Well-being

Employee well-being is conceptualized in different ways depending on the disciplinary focus (Guest, 2017). Many conceptualizations of employee well-being include both a hedonic dimension (feeling okay) and a eudemonic dimension (living life according to personal values) (Forgeard et al., 2011). According to Youssef-Morgan and Luthans (2015) there is an emerging theoretical base that explains why high HERO is associated with high employee well-being. If police officers are high in personal resources (e.g., HERO), Hobfoll (2018) suggests that such individuals are better equipped to gain other resources. We argue that this equates to employees that are more capable of investing HERO to positively develop their well-being. In particular, Avey et al. (2010) proposed that increases in HERO are positively associated with employee well-being because employees high in HERO are positive, confident, and resilient, which link with positive perceptions of feeling and doing well. There is also a growing body of evidence that has found that HERO is positively correlated with employee well-being (Avey et al., 2010; Xerri et al., 2022). Hence, we expect to replicate the existing evidence and hypothesize the following:

H4: High HERO is associated with high employee well-being

Positive psychology scholars have demonstrated that HERO triggers affective and cognitive psychological processes that boost optimism and self-efficacy and increase an individual's sense of control in interpreting and shaping situations to achieve an intended outcome (Youssef-Morgan & Luthans, 2015, p. 184). These findings are consistent with previous

research linking high HERO with low stress and low stress with high well-being for police officers (Farr-Wharton et al., 2016).

In relation to police officers, Cartwright and Roach (2020, p.1333) highlight troubling link between budget cuts reducing the number of police officers available to undertake policing duties, and an alarming increase in psychological sick leave complaints resulting in falling employee well-being for English police officers. In particular, over half of the psychological sick leave complaints fit within the stress category, suggesting a link between organizational stress and employee well-being (Cartwright & Roach, 2020, 1334). The emerging hypotheses testing this link are:

H5 High operational stress is associated with low well-being.

H6 High organizational stress is associated with low well-being.

Mediations

According to Youssef-Morgan and Luthans (2015, p. 185) there is a significant link between HERO and well-being, because over time well-being “is shaped by retained memories of various life events”. However, we argue that the relationship between HERO and well-being can be better explained by considering how operational and organizational stress potentially mediates the relationship. When employees lack the resources associated with HERO to manage their perceived stress at work, it is the stress that is likely to detrimentally influence employee well-being. This means that although psychological resources, such as HERO are related with well-being, it is the positivity of HERO that provides an optimistic interpretation of past events, and they are less likely to perceive the events as stressful. Employees can use these psychological resources “to cope with and overcome challenges, setbacks” (Youssef-Morgan & Luthans, 2015, p.186). However, if work conditions continue to erode psychological resources, then employees have less resources to buffer against stress (Xerri et al., 2020), and

more stress negatively influences well-being (Chen et al., 2015). As such, we argue that HERO indirectly influences employee well-being by reducing perceptions of organizational stress.

Individuals with greater psychological resources will be better equipped to maintain their perceived stress levels or viewing events as less stressful than their counterparts with lower levels of resources, making them less vulnerable to the resource losses caused by perceived organizational and operational stress (Hobfoll, 2018). As well, such individuals will be more capable of investing resources, such as HERO, to maintain and develop their well-being. Hence, we expect that HERO will be negatively related with operational and organizational stress, and in turn will have a positive direct and indirect effect on employee well-being. We, therefore, hypothesize that:

H7a Operational stress mediates the relationship between HERO and well-being for English police officers.

H7b Organizational stress mediates the relationship between HERO and well-being for Italian police officers.

Methods

Sampling and Demographics

Data was collected in 2019 from police officers employed in one large regional police station in England and two regional police stations in Italy. Following the agreement to participate in the study, we administered paper-based surveys in the English and Italian police stations, calling for all police officers to complete a survey administered at one point in time. We used purposive sampling to examine a range of police officers. In England, over 600 surveys were distributed, and 228 completed surveys were received (38% response rate). In Italy, we examined five police stations in the Veneto region. The surveys in Italy were paper-based and were administered directly by the research team with the support of the day shift manager. A

total of 733 surveys were distributed, with a final sample of 220 (30% response rate) (See Table 1).

The English and Italian samples are representative of the current police forces in each of their respective countries. For example, as of 2023, in England and Wales, 35 percent of police officers were female (Hargreaves, 2023). Similarly, our English sample comprised 38.6 percent female and 140 male (61.4%) police officers. In Italy, statistics between 2019-2021 revealed 18.5 percent of the general population of police officers were female (Eurostat, 2023). The gender breakdown of police officers across Italy is similar to our sample, with 55 (25%) female and 165 (75%) male police officers.

Our English sample of police officers comprised 32 (14%) less than 26 years old, 146 (64.1%) between 26 and 40 years of age, 49 (21.5%) between 41 and 55 years of age, and 1 (0.4%) aged 55 years and over. The age of the general population of police officers in the UK is similar to our sample, providing support the police officers sampled are representative of the wider police force in England and Wales. For example, as of March 2023, there were a total of 149,566 police officer employed in England and Wales police force, 13.44 percent were less than 26 years of age, 45.42 percent were between 26-40 years of age, 39.23 percent aged between 41-55, 1.8 percent aged 55 years or over, and .10 percent did not state their age.

.....
Place Table 1 about here
.....

Measures

Employee well-being. To examine employee perceived well-being, we used a 4-item scale developed by Brunetto et al. (2011). A sample item includes “Overall, I am reasonably happy with my work life”. There is evidence of internal consistency, for the English and Italy, with a

composite reliability of 0.836 and 0.852, and the Average Variance Extracted (AVE) equaled 0.569 and .599 respectively.

Psychological capital (HERO). We use Luthans et al. (2006) short psychological capital scale (12-items) including, 'I can think of many ways to reach my current work goals'. There is evidence of internal consistency, for England and Italy, with a composite reliability of 0.858 and 0.821, and the Average Variance Extracted (AVE) equaled 0.608 and .541 respectively.

Organizational and operational police stress. To measure organizational and operational stress, we used a shortened-version of McCreary and Thompson's (2006) measure of Police organizational stress (three items) and operational stress (three items). The three items for each scale were chosen as they were the highest loading set of items that were ultimately reliable between the English and Italian samples. In testing the congeneric measurement models of organizational and operational stress (each comprising 20 items), we found that the original scales lacked adequate model fit and validity. In particular, both scales comprised several items that loaded onto their respective constructs at less than 0.50, indicating potential issues with convergent validity. Due to the validity concerns, poor model fit, and modest sample sizes, we examined a three, four, and five item models, but found that the three item model provided the best overall fit, validity, and was the most parsimonious model. There is evidence of internal consistency, for the England and Italy respectively, with a composite reliability of 0.793 and 0.780 (organizational stress), and 0.746 and 0.784 (operational stress), and the Average Variance Extracted (AVE) equaled 0.562 and .550 (organizational stress), and 0.501 and 0.552 (operational stress).

Controls. due to the relevance of demographic variables - gender, age and service length – in predicting employee well-being (Duran et al., 2021), we control for gender (1=male,2=female), age cohort (1 =<30 years, 2 = 31-44 years, 3 = 45+ years), and service length (1=0-5 years, 2=6-15 years, 3=16-25 years, 4=25+ years).

Data analysis and model estimation

Descriptive statistics were calculated using the Statistical Package for Social Sciences (SPSS v.27). Hypothesis testing was conducted using a two-step structural equation modelling approach (Anderson & Gerbing, 1988) in Analysis of Moment Structures (AMOS) software. To examine the mediation hypotheses, bootstrapping with 2000 samples and a bias corrected confidence interval within AMOS was used by examining significance of the direct and indirect effects of predictor, mediator and criterion variables (MacKinnon et al., 2002). To test the invariance between groups (English & Italian) hypotheses, we conducted a multi-group structural equation modelling analysis in AMOS (Byrne, 2010) – including causal structures invariance tests. Finally, to examine model fit, we adhered to prescriptions by Hu and Bentler (1999): normed chi-square between 1 and 3, CFI \geq .95 for a superior fit, RMSEA close to .06, and SRMR close to .08.

Confirmatory Factor Analysis

The model fit of the hypothesized measurement model was acceptable (see Table 2) for the English cohort ($\chi^2(199) = 353.488$, $p < .001$, RMSEA = 0.06, CFI = 0.92 and SRMR = 0.07) and the Italian cohort ($\chi^2(199) = 373.182$, $p < .001$, RMSEA = 0.06, CFI = 0.92 and SRMR = 0.06) samples. We also found that the hypothesized measurement model for the English and Italian samples provided a superior fit to the alternative measurement models 2-4 (see Table 2), which provides support for the discriminant validity of the study constructs.

.....
Place Table 2 about here
.....

Testing the research model

The zero-order correlation matrix (Table 3) depicts that service length is negatively related with employee well-being for the English and Italian samples. As well, service length was

positively related with operational and organizational stress for the English sample, but not in the Italian sample. Service length was also negatively related with employee HERO in Italy, but not in the English context. Gender also appeared to be an important control variable for the English cohort, with gender being negatively related with HERO and positively related with operational stress, that is, female police officers in England were more likely to perceive significant operational stress and lower HERO compared with their male counterparts.

.....
Place Table 3 about here
.....

To test the hypotheses and common method bias, three structural models were tested. The hypothesized structural provided an acceptable level of model fit, which was significantly better compared with the alternate structural model (Model 2). The common variance was approximately 23 percent. To ensure that common method bias did not impact the results significantly, we first controlled for the common latent factor and found that it did not significantly modify the p-values depicted in Figure 1. As such, to test the hypotheses, we used structural Model 2, including all study and control variables, but omitting the common latent factor. The results from Structural model 1 provide support for all direct hypotheses (see figure 1), except HERO was not significantly related with operational stress (Italian sample). As such, there was only partial support for H1 (high HERO is associated with low employee well-being). Operational stress was also not significantly related with employee well-being for either the English or the Italian samples, and as such the null hypothesis is accepted for hypothesis 5.

Place Figure 1 about here
.....

Table 4 depicts that the standardized indirect effect of HERO onto employee well-being was not significant for the English sample ($\beta = .022, p > .05$), albeit there was a significant indirect effect for the Italian sample ($\beta = .033, p < .05$). These results show that organizational stress

partially mediates the relationship between HERO and employee well-being, which provides partial support for hypothesis 7 (organizational stress mediates the relationship between HERO and employee well-being). Note that operational stress was not examined further as the direct relationship between operational stress and employee well-being was not significant.

.....
Place Table 4 about here
.....

Discussion

In this study, we examined the similarities and/or differences in the way one individual level factor – the personal coping resource (i.e., HERO) - impacts the operational and organizational stress and well-being of police officer SLBs working in England and Italy. The context of the research is that similar to other SLBs, police officers undertake policing activities under conditions of the *public sector gap* (Hupe & Buffat, 2014)), and they use their discretion to prioritize who receives services and who does not (Tummers & Bekkers, 2014; Davidovitz & Cohen, 2022), even if this means modifying the original policy parameters (Bozeman, 2022). However, the rationing process is stressful for SLBs, because they are deciding who will benefit and receive the limited services, and who will be disadvantaged and not receive timely assistance. Far less attention has been paid to how police officers cope with having to use discretion and ration the limited police resources at their disposal (Tummers, 2017) - and its implications for improving organizational processes to better support their delivery of public services (Brodkin, 2013; 2021; Dunlop et al., 2021).

Previously few public administration scholars have separated the impact of operational stress involved in protecting victims of violence and apprehending perpetrators (Tuckey &

Scott, 2014) from the more pervasive and detrimental organizational stress emerging from under-funding, unrealistically high workloads, red tape and poor management (Brunetto et al., 2017; Farr-Wharton et al., 2017), which is also associated with lower productivity and increased sickness (Cartwright & Roach, 2020). Previous research found that supportive management practices can mediate the impact of distress on Australian emergency service SLBs (Farr-Wharton et al., 2022). To add to the extant research, we examined whether personal support in the form of HERO provides another coping strategy likely to buffer SLBs against both operational and organizational stress.

We found limited differences between the experiences of Italian police officers compared with English police officers. For example, Figure 1 and Table 4 depict that HERO is only significantly related to operational stress for English police officers, not Italian police officers. However, high HERO was associated with low organizational stress for both cohorts and high operational stress accounted for much of the organizational stress; and HERO was significantly related to employee well-being. Finally, there was a significant relationship between organizational stress and well-being for both cohorts.

Additionally, for English police officers, organizational stress did not mediate the relationships between HERO and well-being but did partially mediate the relationship for Italian police officers. In total, the variance of HERO and operational stress explain over one quarter of the organizational stress perceived by police officers in Italy and more than 17.4 percent for police officers in England. Additionally, HERO and operational and organizational stress explained almost three-quarters of the well-being perceived by Italian police officers and almost two-thirds of that of English police officers. This is important because Mikkelsen et al. (2023, p2) argues that “bureaucrats' cognitive and behavioral responses to insufficient resources and stress ...” affect the extent to which public users’ perceive administrative burden in accessing a public support.

As discussed, existing evidence has established that being a HERO is critical to the maintenance of employee well-being, and that work stress is related to employee well-being. The contribution of our study is new insight that better explains the link between being a HERO and employee well-being. We add evidence-based knowledge about the upskilling requirements of SLBs, especially if organizational processes are to be improved to better support the delivery of public services (Brodkin, 2013; 2021; Dunlop et al, 2021). HERO is state-based and is, therefore, developmental (Brunetto et al, 2020). If SLBs have higher HERO, it provides them with individual resources to mitigate operational and organizational stress, particularly demonstrating a strong association between high HERO and low organizational stress.

The strongest contribution of this study is that HERO is more pertinent for coping with organizational stress, especially for core-NPM countries - such as England, and is, therefore, likely to have implications for upskilling SLBs working in similar contexts such USA and Australia. The findings provide further support for past research about the source of stress for police officers in the USA (See Violanti et al., 2017; 2018; Shane, 2010; 2013) and in other countries (Purba and Demou, 2019) – each identifying that police officers are more negatively impacted by organizational stress derived from under-resourcing, high workloads, bureaucratic processes and red tape compared with operational stress.

The implication of the findings is that whereas Shane (2010, 815) argued that. “Only with major restructuring efforts will the effects of organizational stress subside”, the findings from this study suggest that upskilling in HERO may provide another pathway to follow. In particular, the findings from this study provide SLOs with new knowledge about how to target a limited training budget to achieve a substantial reduction in organizational stress. Such actions are likely to improve SLOs’ ability to delivery public services more effectively.

This information is necessary because of the negative impact on SLOs' ability to deliver public services effectively after decades of implementing managerialist and measurement models underpinned by austerity (Brodkin, 2021; Dunlop et al., 2021). Numerous scholars (Pollitt & Bouckaert, 2017; Bryson, et al, 2014; Dunlop et al, 2020) have identified the lack of organizational support by SLOs for SLBs as a major weakness. Given the resource-constrained public sector context evident in many countries, it seems likely that SLOs will continue to under-resource SLBs. These same SLOs do, however, have a training budget – albeit possibly limited. The implication for SLB theory, and SLOs and managers responsible for SLBs is that the behavioral responses of SLBs is an important addition to simply understanding the processes they undertake. Within the SLB scholarship, this study adds to previous research about coping (See Loyens & Maesschalck, 2010; Tummers et al., 2015; Baviskar & Winter, 2017; Lavee, 2021) by using COR theory (Hobfoll, 2011) to better understand how an individual level, personal resource – HERO - affects SLBs' ability to cope workplace stressors. Additionally, the use of a psychology theory to explain SLBs' coping behavior, broadens the cross disciplinary input used to explain public scholarship gaps as argued by Ewert et al. (2021).

Additionally, this study builds on previous knowledge that showed the significant benefits of HERO training for increasing HERO (Lupsa et al., 2019) and well-being (Brunetto et al., 2020a), by showing the significant positive impact of HERO on organizational stress for police officers in two different countries. Such upskilling is likely to reduce the impact of stressful work environments on the health and well-being and subsequent productivity of police officers (Cartwright & Roach, 2020).

Future research about SLBs' behavior should focus on the impact of building their existing resources to protect them from psychological distress whilst simultaneously also delivering increased public value. For example, previous research about healthcare SLBs in

Australia showed that they used both their psychological resources (HERO) and behavioral capabilities (innovative, neighbourly and empathetic capabilities) (INE) equals HEROINE to deliver public value to the public (Brunetto et al., 2022). Much of the focus of public administration scholars has previously been on improving organizational processes, however, a new direction of building SLBs' existing resources may prove more effective whilst austerity continues to dominate funding and management decision-making. Hence, scarce training budgets should be allocated to enhancing SLBs' resources to maximize the impact on both SLBs' well-being and the value received by the public.

Theoretically, our study also has an interesting connotation for COR theory. We expected that as loss is disproportionately more salient than resource gains (Hobfoll, 2018) that the impact of organizational and/or operational stress would have a stronger relationship with employee well-being when compared to the relationship between HERO and employee well-being. In contrast, we found that the resource gain spiral that formed between HERO and employee well-being was much stronger for the Italian ($\beta = .80^{***}$) and English ($\beta = .75^{***}$) samples when compared to the potential losses associated with the relationship between organizational stress and well-being for the Italian ($\beta = -.14^*$) and English ($\beta = -.16^*$) samples. These findings provide some evidence that the primacy of loss may not apply to specific resource caravans, such as the caravan formed between the positive constructs HERO and employee well-being. Future research should examine different resource caravans, which results in resource losses and resource gains to further test the primacy of loss for different caravans or different caravan passageways (i.e., the ecological conditions that either foster or limit resource development and maintenance).

Additionally, the implication for practice is that the strong relationship between HERO, organizational stress and well-being suggests the need for targeted HERO training as part of a strong mandate from international policies and best practice HRM. We argue that state-like

resource, HERO, adds a personal support mechanism that can be applied in addition to the workplace, community and family support networks that Morash, Haarr, and Kwak (2006) suggest as important for helping police officers cope with workplace challenges and problems. A study by Amaranto et al. (2003) revealed several organizational stressors reported by police officers, including being second guessed in field work, punishment for minor infractions, lack of rewards, and having their issued firearm confiscated for personal and stress-related problems. Although these conditions can each be specifically addressed through policy and management interventions designed to support police officers (Shane, 2010), the study by Amaranto and colleagues highlights police officers report low morale due to such conditions.

When training interventions are geared towards building employees' capabilities and psychological resources, such as HERO, such training programs not only provide police officers with psychological understanding, but it also provides resources they can draw on to be able to cope with organizational stressors, such as the excessive focus on rules, routines and formal norms outlined by Shane (2010). Such training also provides police officers with the capability to be able to maintain their morale and other personal resources to limit the personal and stress-related concerns. In addition, training interventions designed to help police officers maintain and develop their psychological resources also adheres to the UN SDGs – especially the third SDG employees' "good health and well-being" (UN, 2020); along with WHO (2016) program for improving employee health outcomes by promoting employee well-being at work and the new IS aimed at improving employee well-being. Finally, training is a HR activity that for too long has acted as the extended arm of management instead of the protector of human resources (Brunetto et al, 2023). SLOs need to consider adopting '*Common Good HRM*' model (Aust et al., 2019) which argues that organizational HRM policies, processes and practices should be in line with the UN SDGs.

Conclusion

We used COR theory to add to SLB coping scholarship to examine the impact of HERO on SLBs' operational and organizational stress and employee well-being. We found that when police officers have psychological resources available for coping,; they have higher employee well-being. We also conclude that for England and Italy, organizational stress was significantly related with employee well-being, The finding provides SLOs with an evidence-based best management practice for targeting the most effective training for reducing organizational stress perceived by SLBs. As organizational stress was found to be negatively correlated with employee well-being, training that effectively reduces perceived organizational stress should have a flow on effect, reducing the potential impact of organizational stress on employee well-being.

Table 1. Demographics

ENGLISH			Italy		
Gender	N	%	Gender	N	%
Male	140	61.4	Male	165	75
Female	88	38.6	Female	55	25
Total	228	100	Total	220	100
Position	N	%	Position	N	%
Superintendent	0	0	Superintendent	5	2.3
Inspector	2	.9	Inspector	22	10
Sergeant Major 2	0	0	Sergeant Major 2	11	5
Sergeant Major 1	0	0	Sergeant Major 1	16	7.3
Sergeant	16	7	Sergeant	13	5.9
Constable	208	91.2	Constable	142	64.5
<i>Missing</i>	2	.9	<i>Missing</i>	11	5
Total	228	100	Total	220	100
Generation	N	%	Generation	N	%
=< 30 years	88	38.5	=< 30 years	134	60.9
31-44 years	97	42.5	31-44 years	73	33.2
45+ years	31	13.6	45+ years	13	5.9
<i>Missing</i>	12	5.3	<i>Missing</i>	0	0
Total	228	100	Total	220	100
Service length	N	%	Service length	N	%
0-5 years	104	45.5	0-5 years	73	33.2
6-15 years	77	33.8	6-15 years	88	40
16-25 years	30	13.2	16-25 years	43	19.5
25+ years	8	3.5	25+ years	16	7.3
<i>Missing</i>	9	4	<i>Missing</i>	0	0
Total	228	100	Total	220	100

Table 2. Results of model-fit and test of invariance

Step 1. Baseline model								
ENGLISH								
Factors	X²	df	X²/df	Δχ²	RMSEA	CFI	SRMR	
Model 1: Hypothesised measurement model	353.488	199	1.776		.06	.92	.07	
Model 2: Combined HERO with organizational stress	547.756	202	2.702		.09	.82	.09	
Model 3: Combined HERO with operational stress	551.935	202	2.732		.09	.82	.09	
Model 4: Combined turnover intention with HERO	514.023	202	2.545		.08	.84	.08	
Italy								
Factors	X²	df	X²/df	Δχ²	RMSEA	CFI	SRMR	
Model 1: Hypothesised measurement model	373.182	199	1.875		.06	.92	.06	
Model 2: Combined HERO with organizational stress	598.967	202	2.965		.10	.81	.10	
Model 3: Combined HERO with operational stress	556.247	202	2.754		.09	.83	.09	
Model 4: Combined turnover intention with HERO	481.649	202	2.384		.08	.87	.08	
Step 2. Structural model and test of invariance								
Model 1: Hypothesised structural model	929.098	524	1.773		.04	.90	.07	
Model 2: Mediated structural model (removed parameter from HERO to employee well-being)	1130.998	526	2.150		.05	.86	.13	
Model 3: Model 1 with a common latent factor	795.053	482	1.649		.04	.93	.07	
ENGLISH and Italy					Δχ²	Δdf	P	
					Model 1 (Measurement)	40.227	15	<.01
					Model 2 (Structural)	72.391	27	<.01

Table 3. Zero-order correlation matrix – England and Italy

	α	S.D.	α	S.D.	1	2	3	4	5	7	8
	England	England	Italy	Italy							
1. Gender	1.39	.49	1.25	.43	1	-.12	.11	.06	-.05	.03	.02
2. Generation	1.74	.70	1.45	.61	-.13	1	-.38**	.10	-.11	.05	.00
3. Service length	3.59	1.05	4.01	.91	-.10	.49**	1	-.17*	-.08	-.08	-.17*
4. Employee well-being	4.06	.91	4.42	.75	-.02	-.06	-.13*	1	-.19*	.09	.68**
5. Organizational stress	4.80	1.29	4.68	.82	.08	.03	.15*	-.25**	1	.38**	-.06
6. Operational stress	3.65	1.22	4.14	1.04	.16*	.10	.16*	-.15*	.23**	1	.08
7. Psychological capital	4.22	.64	4.47	.67	-.14*	-.02	-.06	.60**	-.16*	-.20**	1

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed). ENGLISH below the diagonal. Note: S.D. = standard deviation. NOTE: ENGLISH = United Kingdom and ITA = Italy

Table 4. Direct Effects between variables (Hypotheses 1-6) and mediation outcomes (Hypothesis 7)

No	Hypothesis	Outcome for Italian SLBs	Outcome for English SLBs
H1	High HERO is associated with low operational stress.	Not Significant	Significant
H2	High HERO is associated with low organizational stress.	Significant	Significant
H3	High operational stress is associated with high organizational stress.	Significant	Significant
H4	High HERO is associated with high employee well-being	Significant	Significant
H5	High operational stress is associated with low well-being.	Not Significant	Not Significant
H6	High organizational stress is associated with low well-being.	Significant	Significant

The results for England	Total effect	Direct effect	Indirect effects	Result
H7b. Organizational stress mediates HERO to employee well-being	$\beta = .772, p < .001$	$\beta = .750, p < .001$	$\beta = .022, p > .05$	No mediation

The results for Italy	Total effect	Direct effect	Indirect effects	Result
H7b. Organizational stress mediates HERO to employee well-being	$\beta = .833, p < .001$	$\beta = .800, p < .001$	$\beta = .033, p < .05$	Partial mediation

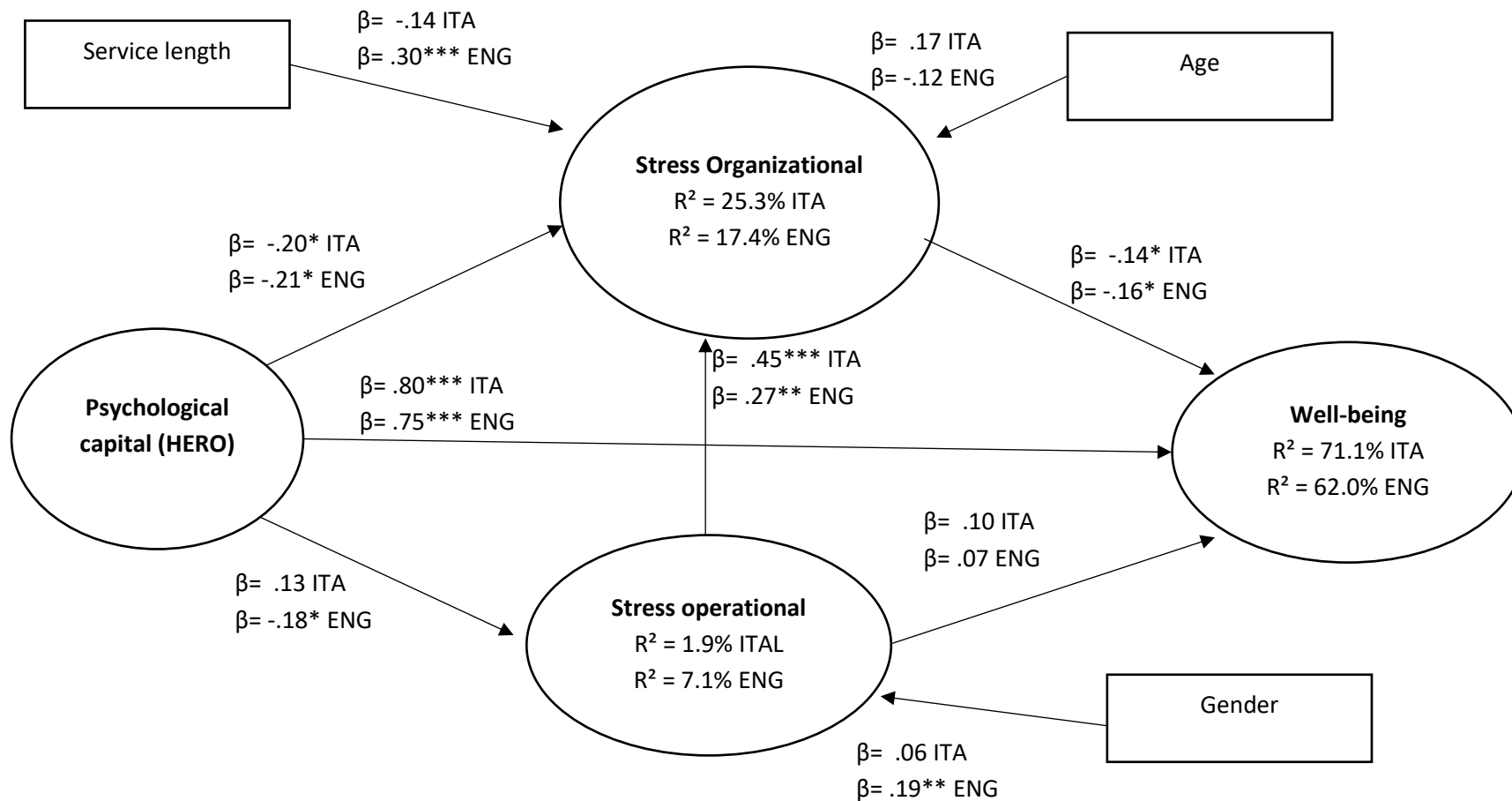


Figure 1: Hypothesized parameter estimates (standardized)

***Correlation is significant at the 0.001 level. **Correlation is significant at the 0.01 level. *Correlation is significant at the 0.05 level. Note: ENG = England; ITA = Italy

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Adendorff, G., Dick, T., Xerri, M & Brunetto, Y. (2021). Does the talk match the walk for Australian local government employees: The link between leadership and employee well-being *Australian Journal of Public Administration* 80(4), 769-789.
- Anshel, M. H. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice and Behavior*, 27, 375-400.
- Anshel, M. H., Robertson, M., and Caputi, P. (1997). Sources of acute stress and their appraisals and reappraisals among Australian police as a function of previous experience. *Journal of Occupation and Organizational Psychology*, 70, 525-549.
- Avey J., Reichard R., Luthans F., Mhatre K. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly* 22, 127–52.
- Baviskar, S., & Winter, S. C. (2017). Street-level bureaucrats as individual policymakers: The relationship between attitudes and coping behavior toward vulnerable children and youth. *International Public Management Journal*, 20(2), 316-353.
- Boag-Munroe F, Donnelly J, van Mechelen D, et al. (2017). Police officers' promotion prospects and intention to leave the police. *Policing*, 11, 132–145.
- Bozeman, B. (2022). Rules compliance behavior: A heuristic model. *Perspectives on Public Management and Governance*, 5(1), 36-49.
- Bozeman, B., Youtie, J., & Jung, J. (2021). Death by a Thousand 10-minute tasks: Workarounds and noncompliance in university research administration. *Administration & Society*, 53(4), 527-568.
- Brodkin, E. Z. (2011). Policy Work: Street-Level Organizations Under New Managerialism. *Journal of Public Administration Research and Theory* 21 (suppl 2), 253–277.
- Brodkin, E. Z. (2012). Reflections on Street-Level Bureaucracy: Past, Present, and Future. *Public Administration Review*, 72(6), 940–949. doi:10.1111/j.1540-6210.2012.02657.x.
- Brodkin, E. Z. (2021). Street-Level Organizations at the Front Lines of Crises. *Journal of Comparative Policy Analysis: Research and Practice*. doi:10.1080/13876988.2020.1848352.

- Brough, P., Brown, J., Biggs A. (2016). Toxic environments: occupational stress. In: Brough P., Brown, J., Biggs, A. (Eds.), *Improving criminal justice workplaces translating theory and research into evidence based practice*. Routledge, New York (pp. 157–166).
- Brown, J., Cooper, C. L., & Kirkcaldy, B. (1996). Occupational stress among senior police officers. *British Journal of Psychology*, 87, 31-45.
- 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. *International Journal of Human Resource Management*, 34(4), 832-854.
- Brunetto, Y., T. Dick, M. Xerri, and A. Cully. (2020a). Building Capacity in the Healthcare Sector: A Strengths Based Approach for Increasing Employees' Well-Being and Organisational Resilience. *Journal of Management & Organisation* 26(3), 309–323
- Brunetto, Y., Teo, S., Farr-Wharton, R., Shacklock, K & Shriberg, A., (2017). Individual and organizational support: does it affect red tape, stress and work outcomes of police officers in the USA? *Personnel Review*, 46(4), 750-766.
- Brunetto, Y., Farr-Wharton, B., Farr-Wharton, R., Shacklock, K., Azzopardi, J., Saccon, C., Shriberg, A. (2020b). 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., 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* <https://doi.org/10.1080/14719037.2022.2133159> .
- Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2011). Using the Harvard HRM model to conceptualise the impact of changes to supervision upon HRM outcomes for different types of public sector employees. *International Journal of Human Resource Management*, 22(3), 553–563.
- Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public Value governance: Moving Beyond Traditional Public Administration and the new Public Management. *Public Administration Review*, 74(4), 445–456.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge
- Cartwright, A. and Roach, J. (2020). The Wellbeing of English Police: a study of recorded absences from work of English police employees due to psychological illness and stress

- using Freedom of Information Act data. *Policing: A Journal of Policy and Practice* 15(2), 1326–1338.
- Chang, A., & Brewer, G. A. (2023). Street-Level bureaucracy in public administration: A systematic literature review. *Public management review*, 25(11), 2191-2211.
- Charman, S. (2017). *Police Socialisation, Identity and Culture: Becoming Blue*. Basingstoke: Palgrave.
- Chen, S., M. Westman, and S. E. Hobfoll. (2016). The Commerce Crossover of Resources: Resource Conservation in the Service of Resilience. *Stress and Health*, 31(2), 95–105.
- Cohen, N., and U. Hertz. (2020). Street-Level Bureaucrats' Social Value Orientation on and off Duty. *Public Administration Review*, 80(3), 442–453. doi:10.1111/puar.13190.
- Davidovitz, M., and Cohen, N. (2022). Playing Defence: The Impact of Trust on the Coping Mechanisms of Street-Level Bureaucrats. *Public Management Review*, 24(2), 279–300.
- Dick, G., and Metcalfe, B. (2001). Managerial factors and organisational commitment-A comparative study of police officers and civilian staff. *International Journal of Public Sector Management*, 14(2), 111–128.
- Doci, E., Knappert, L., Nijs, S., & Hofmans, J. (2023). Unpacking psychological inequalities in organisations: Psychological capital reconsidered. *Applied Psychology*, 72(1), 44-63.
- Domingues, I.P. and Machado, J.C. (2017). The loosely coupled factors of organizational stress in police forces. *Policing: An International Journal*, 40(4), 657-671.
- Duran, F., Woodhams, J., & Bishopp, D. (2021). The relationships between psychological contract violation, occupational stress, and well-being in police officers. *International Journal of Stress Management*, 28(2), 141-146.
- Dudau, A. I., Kominis, G., & Brunetto, Y. (2020). Red Tape and Psychological Capital: A Counterbalancing Act for Professionals in Street-Level Bureaucracies. *Journal of Professions and Organization*, 7(3), 334 –350
- Dunlop, C. A., E. Ongaro, and K. Baker. (2020). Researching COVID-19: A Research Agenda for Public Policy and Administration Scholars. *Public Policy and Administration* 35 (4): 365–383. doi:10. 1177/0952076720939631.
- Eurostat. (2023). Police, court and prison personnel statistics.
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Police,_court_and_prison_personnel_statistics#police_officers_per_100_000_inhabitants_in_the_2019-2021_period.2C_18.5_.25_were_females
- Ewert, B., Loer, K., & Thomann, E. (2021). Beyond nudge: advancing the state-of-the-art of behavioural public policy and administration. *Policy & Politics*, 49(1), 3-23.

- Farr-Wharton, B., M. Xerri, and Y. Brunetto. (2021). Austerity, Staff Inadequacy, and Contracting-Out Social Services: How Many Government Inquiries Does It Take to Improve Social Policy Outcomes in Aged Care? *Australian Journal of Public Administration* 80(4), 790–808. doi:10.1111/1467- 8500.12463.
- Farr-Wharton, B, Shacklock, K, Brunetto, Y, Teo, S., Farr-Wharton, R. (2017). Workplace Relationships, Bullying, and Outcomes for Police Officers in Australia. *Public Money & Management*, 37(5), 325-332.
- 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. *Public Performance & Management Review* DOI: 10.1177/0734371X221130977
- Farr-Wharton, B., Azzopardi, J., Brunetto, Y., Farr-Wharton, R., Herold, N., & Shriberg, A. (2016). Comparing Malta and USA Police Officer’s individual and organizational support on outcomes. *Public Money & Management*, 36(5), 333–340.
- Farr-Wharton, B., Brunetto, Y., Wankhade, P., Saccon, C., & Xerri, M. (2021). Comparing the impact of authentic leadership on Italian and English police officers’ discretionary power, wellbeing and commitment. *Policing: An International Journal*, 44, 741–755.
- Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., and Dewa, C. (2013). Organizational Stressors Associated with Job Stress and Burnout in Correctional Officers: A Systematic Review. *BMC Public Health* 13, 82-95.
- Fox, M. L., Dwyer, D. J., & Ganster, D. C. (1993). Effects of stressful job demands and control on physiological and attitudinal outcomes in a hospital setting. *Academy of Management journal*, 36(2), 289-318.
- Grimmelikhuijsen, S., Jilke, S., Olsen, A. L., & Tummers, L. (2017). Behavioral public administration: Combining insights from public administration and psychology. *Public Administration Review*, 77(1), 45-56.
- Gutschmidt, D. and Vera, A. (2022) Organizational culture, stress, and coping strategies in the police: an empirical investigation, *Police Practice and Research*, 23(5), 507-522.
- Hargreaves, J. (2023). Police workforce, England and Wales: 31 March 2023 (second edition). Police workforce, England and Wales publication series. Home Office, United Kingdom. <https://www.gov.uk/government/statistics/police-workforce-england-and-wales-31-march-2023/police-workforce-england-and-wales-31-march-2023>
- Henderson, A., & Charbonneau, E. (2016). An examination of emergency services research in Public Administration. *Public Administration Quarterly*, 40(3), 559–588.

- Heyman, M., Dill, J., & Douglas, R. (2018). *The Ruderman white paper on mental health and first responders*. https://issuu.com/rudermanfoundation/docs/first_responder_white_paper_final_ac270d530f8bfb
- Hobfoll, S. E. (2011). Conservation of resources theory: Its implication for stress, health, and resilience. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 127–147). Oxford University Press.
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Hood, C. (1991). A Public Management for All Seasons? *Public Administration*, 69(1), 3-19.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- 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.
- Jilke, S., & Tummers, L. (2018). Which clients are deserving of help? A theoretical model and experimental test. *Journal of Public Administration Research and Theory*, 28(2), 226–238. <https://doi.org/10.1093/jopart/muy002>
- Keech J., Cole K., Hagger M., & Hamilton K., (2020). The association between stress mindset and physical and psychological wellbeing: testing a stress beliefs model in police officers, *Psychology & Health*, 35(11), 1306-1325, DOI: 10.1080/08870446.2020.1743841
- Kukić, F., Streetman, A., Koropanovski, N., Čopić, N., Fayyad, F., Gurevich, K., Zaborova, V., Krikheli, N., Dopsaj, M. and Heinrich, K.M. (2021). Operational stress of police officers: A cross-sectional study in three countries with centralized, hierarchical organization, *Policing: A Journal of Policy and Practice*, 16(1), 95–106.
- Lavee, E. (2021). Who is in charge? The provision of informal personal resources at the street level. *Journal of Public Administration Research and Theory*, 31(1), 4-20.
- Loftus, B. (2010). Police occupational culture: classic themes, altered times. *Policing and Society: An International Journal of Research and Policy*, 20(1), 1-20.
- Loyens, K., & Maesschalck, J. (2010). Toward a theoretical framework for ethical decision making of street-level bureaucracy: Existing models reconsidered. *Administration & Society*, 42(1), 66-100.

- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 387-393.
- Luthans, F., Luthans, K., & Luthans, B. C. (2004). Positive psychological capital: Going beyond human and social capital. *Business Horizons*, 47, 45-50.
- Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—employee performance relationship. *Journal of Organizational Behavior*, 29(2), 219-238.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104.
- McCarty, W. P. and Skogan, W. G. (2013). Job-related burnout among civilian and sworn police personnel. *Police Quarterly*, 16(1), 66–84.
- McCreary, D.R., Fong, I. and Groll, D.L. (2017). Measuring policing stress meaningfully: establishing norms and cut-off values for the Operational and Organizational Police Stress Questionnaires, *Police Practice and Research*, 18(6), 612-623.
- McCreary, D. R., & Thompson, M. M. (2006). Development of two reliable and valid measures of stressors in policing: The operational and organizational police stress questionnaires. *International Journal of Stress Management*, 13(4), 494-518.
- Mikkelsen, K. S., Madsen, J. K., & Baekgaard, M. (2023). Is stress among street-level bureaucrats associated with experiences of administrative burden among clients? A multilevel study of the Danish unemployment sector. *Public Administration Review*. DOI: 10.1111/puar.13673
- Lipsky, M. (1980). *Street-Level Bureaucracy. Dilemmas of the Individual in Public Services*. New York. Russell Sage Foundation
- Lupsa, D., Virga, D., Maricutoiu, L. P., & Rusu, A. (2019). Increasing psychological capital: A pre-registered meta-analysis of controlled interventions. *Applied Psychology: An International Review*. <https://doi.org/10.1111/apps.12219>
- Morash, M., Haarr, R., and Kwak, D. H. (2006). Multilevel influences on police stress. *Journal of contemporary criminal justice*, 22(1), 26-43.
- Olsen, A. L., Tummers, L., Grimmelikhuijsen, S., & Jilke, S. (2018). *Behavioral public administration: Connecting psychology with European public administration research*.

- The Palgrave handbook of public administration and management in Europe, 1121-1133.
- Pindek, S., & Spector, P. E. (2016). Organizational constraints: A meta-analysis of a major stressor. *Work & Stress, 30*, 7-25.
- Pollitt, C., & Bouckaert, G. (2017). *Public Management Reform: A comparative analysis-into the age of austerity*. Oxford University Press.
- Purba, A., & Demou, E. (2019). The relationship between organisational stressors and mental wellbeing within police officers: A systematic review. *BMC Public Health, 19*, 1286. <https://doi.org/10.1186/s12889-019-7609-0>
- Reiser, M. (1974). Some organizational stresses on policemen. *Journal of Police Science and Administration, 2*(2), 156–159.
- Setti, I., & Argentero, P. (2013). Stress in local police officers: Adapting a tool for measuring operational and organizational stressors into Italian. *Giornale Italiano di Medicina del Lavoro e Ergonomia, 35*, 157–162.
- Schaubroeck, J. (1999). Should the subjective be the objective? On studying mental process, coping behavior, and actual exposures in organizational stress research. *Journal of Organizational Behavior, 20*, 753-760
- Shane, J.M. (2010). Organizational stressors and police performance. *Journal of Criminal Justice, 38*(4), 807-818.
- Shane, J. M. (2013). Daily work experiences and police performance. *Police Practice and Research, 14*(1), 17-34.
- Trincherro, E., Farr-Wharton, B., & Brunetto, Y. (2019). A Social Exchange Perspective for Achieving Safety Culture in Healthcare Organizations” *International Journal of Public Sector Management, 32*(2), 142-156.
- Tuckey, M. R., & Scott, J. E. (2014). Group critical incident stress debriefing with emergency services personnel: A randomized controlled trial. *Anxiety, Stress & Coping: An International Journal, 27*, 38–54.
- Tummers, L. (2017). The relationship between coping and Job Performance. *Journal of Public Administration Research and Theory, 27*(1), 150–162.
- Tummers L, & Bekkers V. (2014). Policy Implementation, Street-Level Bureaucracy, and the Importance of Discretion. *Public Management Review, 16*(4), 527-47.
- Tummers, L. L., Bekkers, V., Vink, E., & Musheno, M. (2015). Coping during public service delivery: A conceptualization and systematic review of the literature. *Journal of Public Administration Research and Theory, 25*(4), 1099-1126.

- Varker, T., Dennison, M. J., Bancroft, H., Forbes, D., Nursey, J., Sadler, N., Creamer, M., Khoo, A., Metcalf, O., Putica, A., Pedder, D. J., & Phelps, A. J. (2023). Mental health, operational stress, and organizational stress among sworn and unsworn police personnel. *Traumatology*, 29(2), 330–337.
- Vila, B. (2000). *Tired cops: The importance of managing police fatigue*. Washington DC: Police Executive Research Forum.
- Vink, E., Tummers, L., Bekkers, V. J. J. M., and Musheno, M., (2015). *Decision-Making at the Frontline: Exploring Coping with Moral Conflicts During Public Service Delivery*, In Jenny M. Lewis and Mark Considine (Eds.) *Making public Policy Decisions* (London: Routledge), 112-128.
- Violanti, J.M., Charles, L.E., McCanlies, E., Hartley, T.A., Baughman, P., Andrew, M.E., Fekedulegn, D., Ma, C.C., Mnatsakanova, A. and Burchfiel, C.M. (2017). Police stressors and health: a state-of-the-art review. *Policing: An International Journal*, 40(4), 642–656.
- Violanti, J. M., Mnatsakanova, A., Andrew, M. E., Allison, P., Gu, J. K., & Fekedulegn, D. (2018). Effort–reward imbalance and overcommitment at work: associations with police burnout. *Police quarterly*, 21(4), 440-460.
- Waddington, P.A.J. (1999). Police (canteen) sub-culture: an appreciation. *British Journal of Criminology*, 39(2), 287-309.
- Wankhade, P., Stokes, P., Tarba, S., & Rodgers, P. (2020). Work intensification and ambidexterity - the notions of extreme and ‘everyday’ experiences in emergency contexts: surfacing dynamics in the ambulance service. *Public Management Review*, 22(1), 48–74.
- Wankhade, P., Heath, G., & Radcliffe, J. (2018). Cultural change and perpetuation in organizations: evidence from an English emergency ambulance service. *Public Management Review*, 2(6), 923–948.
- Wuestewald, T. and Steinheider, B. (2012). Police managerial perceptions of organizational democracy: a matter of style and substance, *Police Practice and Research*, 13(1), 44-58.
- World Health Organization. (2016). World Health Organization. Retrieved April 9, 2016, from <https://www.who.int/health-topics/occupational-health>

- World Health Organization. (2018). Mental Strength: Strengthening our response
<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Xerri, M., Brunetto, Y., & Farr-Wharton, B. (2019). Support for aged care workers and quality care in Australia: A case of contract failure? *Australian Journal of Public Administration*, 78(4), 546–561. <https://doi.org/10.1111/1467-8500.12379>
- Xerri, M. J., Cozens, R., & Brunetto, Y. (2022). Catching Emotions: The moderating role of emotional contagion between leader-member exchange, psychological capital and employee well-being. *Personnel Review*, DOI 10.1108/PR-11-2021-0785
- Xerri, M. J., Farr-Wharton, B., & Brunetto, Y. (2021). Nurturing psychological capital: an examination of organizational antecedents: the role of employee perceptions of teamwork, training opportunities and leader–member exchange. *Personnel Review*, 50(9), 1854-1872.
- Youssef-Morgan, C.M., & Luthans, F. (2015). Psychological capital and well-being. *Stress & Health*, 31, 180–188.