PERCEPTIONS OF WELLBEING SUPPORT SERVICES IN PRISON OFFICERS AND THE ROLE OF HYPERMASCULINITY AS A BARRIER TO HELP-SEEKING

BY

BETH BOWDEN WRIGHT

A thesis submitted to the University of Birmingham for the degree of Doctorate in Forensic Psychology Practice (ForenPsyD)

ABSTRACT

The prison environment presents professionals with a uniquely unsafe workplace compared to most other occupations. Prison officers are required to balance the enforcement of security and management of offender behaviour, whilst simultaneously promoting and modelling prosocial attitudes to aid the process of rehabilitation. Numerous other aspects distinctive to the prison environment and the prison officer role can cause a detrimental impact on the psychological wellbeing of this population. Consequently, prison officers are at a significantly higher risk of occupational stress, burnout and mental health difficulties. This thesis aims to explore the social world of professionals working in prison, and to develop an understanding of the factors that may impede on the effective management of the prisoner population. Chapter 1 provides an introduction to the research field. Chapter 2 presents a systematic review of the literature exploring the individual and organisational factors associated with occupational stress and burnout in prison personnel. Chapter 3 attempts to address gaps in the research through an empirical research study exploring the extent to which hypermasculinity is embedded within the prison climate, and whether this impacts on prison officers 'willingness to seek psychological support if they need it. Chapter 4 critiques a widely used measure of hypermasculinity   The Hypermasculinity Inventory (Mosher & Sirkin, 1984). Finally, chapter 5 brings together the findings from the previous chapters and offers recommendations for future practice. The limitations of this thesis, alongside areas for further research are considered.

ACKNOWLEDGEMENTS

First and foremost, I am forever grateful towards my supervisor, Dr Caroline Oliver, whose unwavering support and guidance has been paramount throughout my doctoral journey.

My appreciation extends next to my Mum and Dad - the two people who have been my pillars of strength and constant encouragement. Without their love and sacrifices, this accomplishment would not have been possible. I owe this success to their unwavering belief in me. My Mum's ability to listen with an open heart and provide compassionate guidance has been an immense comfort during the challenging moments of my thesis; whilst my dad's practical problem-solving skills and can-do attitude has inspired me to push beyond my limits and move forward with purpose.

I would also like to express my deep gratitude to my brothers Jacob and Toby, and to my sister Mouse, whose presence have sustained me through the ups and downs of the past few years, and who have helped me to keep perspective when things seemed overwhelming.

Finally, I offer my heartfelt thanks to my partner, Dhruvin, who has been my peace. His ability to find joy in the small things in life, and make me cry-laugh with a well-timed joke has been a much-needed respite from the demands of academic life. Your presence has brought me immeasurable happiness and light; thank you for always believing in me.

Table of contents

List of tables

List of figures

CHAPTER 1: INTRODUCTION

The role of a prison officer

Prison is often referred to as a microcosm of our broader society (Kinner & Young, 2018). It has its own multilayered ecosystem in which rules and routine are enforced. As such, working within this environment presents a unique set of challenges, as the environment can be a tense, volatile, and hostile place. Prison officers are critical members of the public safety personnel, tasked with containing and managing a risky, yet vulnerable population, in an environment full of violence, substance misuse, self-harm and suicide (Steiner & Wooldredge, 2015). The role of a prison officer extends beyond the archaic custodial tasks, with the expectation now to uphold physical and procedural security whilst building a rehabilitative culture that supports the prisoners to adopt more prosocial ways of living (Walker et al., 2018). The former often means that prison officers are exposed to serious incidents of violence, not only falling victim to direct assault, but also when intervening on prisoner-to-prisoner violence, increasing their risk of harm (Liebling et al., 2010). Recent statistics also highlight prison officers' frequent exposure to interpersonal violence, evidencing a large number of prisoner-to-staff assaults (7979), as well as prisoner-to-prisoner assaults (13,784) in England and Wales in just a 3-month period (Ministry of Justice, 2021).

The expectation for prison officers to perform a central role in promoting and modelling prosocial attitudes has been coined 'dynamic security' (Santorso, 2021; Walker et al., 2018). It is characterised by compassionate interactions with the prisoners and the development of effective relationships that can be used to inform the management approach they take day-to-day. Given the complexities of the role, the intricate balancing act between 'control' and 'care' defines prison officers as the lynchpin of the smooth and effective management of the prison system (Ellis, 1979).

Due to operating within a high-pressure environment, prison officers have been referred to as a high-risk population for occupational stress, burnout and other mental health issues, with workplace stress being acknowledged by the prison system to be a key health concern (Dowler, 2005). Occupational stress and burnout are two distinct concepts, despite the terms being used interchangeably (Pines & Keinan, 2005). Occupational stress has been defined as a response to damaging workplace stimuli, where an individual's adaptive capabilities are strained, creating feelings of frustration, tension and psychological discomfort (Bhui et al., 2016; Hurrell & Sauter, 2017). This most often occurs when there are discrepancies between workplace demands and coping resources, leading to psychological and physiological responses that include anxiety, depression, physical health problems and burnout (Babatunde, 2013; Haynes et al., 2020). The NHS has understood occupational stress to be the precursor to burnout and reflects the feeling of there being 'too much'; for example, too much to do, too many demands and changes (NHS Leadership Academy, 2022).

On the contrary, burnout is triggered from a chronic feeling that there is 'not enough'; for example, not enough time, energy, internal or external resources (NHS Leadership Academy, 2022; Salvagioni et al., 2017). Burnout has a progressive onset and manifests through the erosion of coping skills and a chronic feeling of overwhelm in response to occupational stressors (Moss, 2021). Jackson and Maslach (1982) proposed a multi-dimensional model of burnout, that has been the most widely cited framework within the literature (Schaufeli et al., 2009). The model encompasses three main features: emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment. Burnout is considered unique from other mental health difficulties as it is context-dependent, and can only occur in response to the work environment (Schaufeli et al., 2009).

In the UK, a large proportion of prison officers every year are signed off from work as a result of stress-related illnesses, anxiety and depression, as well as recovery from physical injury as a result of prison violence (Denhof et al., 2013). In 2020, the prison system lost over 85,000 working days due to mental health related absences, with this being the most common cause of sick leave over the past 7 years (Her Majesty's Prison and Probation Service, 2020). Therefore, this population is at a considerably higher risk of burnout, as a result of the chaotic and unpredictable nature of the environment, a reduced sense of personal safety and other factors intrinsic to the role (Steiner & Wooldredge, 2015). Definitions of occupational stress and burnout, and how this is experienced within the prison personnel population will be explored in more depth in chapter 2.

Theories of employee work stress

As outlined, it is widely accepted that occupational stress and burnout can have both economical and health impacts on individuals and organisations (Sur & Ng, 2014). Models of work stress are essential in understanding the causes and consequences of occupational strain, as well as to inform the development of effective interventions to support staff teams (Bhui et al., 2016). Theories of employee work stress and wellbeing can provide a framework for examining the complex interplay between individual, organisational, and environmental factors that contribute to strain (Karasek, 1979). By understanding the underlying mechanisms of work stress, this can inform processes that may reduce the impact on employees' physical and mental health and improve their work performance (Hobfoll, 1989). Moreover, models of work stress can inform organisational policies and practices that promote employee well-being and prevent work-related stress. Two models of occupational stress will be discussed: the Job Demands-Control (JDC) Theory and the Job Demands-Resources (JD-R) model.

The Job Demands-Control Theory

The Job Demands-Control (JDC) Theory (Karasek et al., 1979) has been one of the most influential models seeking to understanding the impact of job characteristics on employee health and well-being. The theory proposes that job demands, such as high workload and time pressure, and job control, such as the ability to make decisions about one's work, are the two central factors that determine the stress levels experienced by the employee. The theory proposes that high job demands in combination with low job control create a high-stress work environment that can lead to negative physical and mental health outcomes (Magnavita et al., 2020). Conversely, high perceived job control and a manageable level of job demands is suggested to create a low-stress work environment that promotes employee well-being and job satisfaction (Taris et al., 2019). The JDC theory has been extensively researched and has provided a valuable framework for understanding the impact of job design on employee health and well-being. Several recent studies provide support for the JDC model; for example, research has demonstrated that high job demands, and low job control were associated with increased levels of burnout (Lu et al., 2021) and symptoms of anxiety and depression (Sargent and Terry, 2021). On the contrary, high job control were associated with lower levels of burnout and better mental health outcomes. These findings provide additional evidence for the importance of job control in mitigating the negative effects of job demands on employee well-being, consistent with the JDC model.

The Job Demand-Resources Theory

Another important model of job stress in the occupational health literature is the Job Demand-Resources (JD-R) model proposed by Demerouti et al. (2001). The JD-R model builds on the JDC model and suggests that job resources play an essential role in preventing negative outcomes associated with job demands (Van den Broeck et al., 2020). Job demands

refer to the organisation, physical, psychological, or social features of a job that require sustained physical or cognitive effort and are associated with physiological and psychological costs (Bakker et al., 2014). Job resources, on the other hand, refer to the physical, psychological, social, or organisational aspects of a job that support employees to achieve work goals, reduce job demands, and promote well-being (Schaufeli et al., 2009). The JD-R model suggests that the interaction between job demands and job resources determines the degree to which individuals experience stress, engagement, and well-being in their work environment. Empirical evidence supports the core propositions of the JD-R model, as several studies have shown that job resources are positively associated with employee wellbeing and engagement, while job demands are positively associated with job strain and burnout (Bakker & Demerouti, 2007; Llorens et al., 2021). Furthermore, job resources have been shown to buffer the negative effects of job demands on employee wellbeing, such as burnout and depression (Bakker et al., 2005).

In the context of the prison officer population, the JD-R model and the JD-C model can help to identify specific job demands and resources that are relevant to this profession, as well as inform the development of practical interventions to promote employee well-being and mental health (Mackenzie et al., 2018). By reducing job demands, increasing job resources, and providing greater job control, prison officers may be better equipped to cope with the high levels of stress and trauma associated with their role (Van den Bergh & Den Hartog, 2017).

Hypermasculinity

Research investigating the prison climate has long documented the entrenched and systemic nature of the hypermasculine culture within prisons across the world (Sykes, 1958).

Hypermasculinity, sometimes referred to as 'toxic masculinity', has been characterised as an extreme form of masculine gender ideology, where males over-emphasise and exaggerate the traditional male role (Mosher & Sirkin, 1984). Hypermasculinity is not considered an 'all or nothing' construct, but is understood to fall on a spectrum, in which individuals can present at different levels of intensity of the traits (Corprew et al., 2014). Researchers are yet to deduce a single definition of hypermasculinity, but have highlighted violence, dominance over others, impulsivity (Kupers, 2005), callous attitudes towards women (Mosher & Sirkin, 1984), anger as the most readily expressed emotion (Haney, 2011) and avoidance of vulnerability (Burk et al., 2004) as central features.

The gender literature provides a fruitful array of theories that support the understanding of how and why hypermasculine attitudes play out. Connell's (1987) Gender Order Theory presents the idea that there is a dominant, 'hegemonic' form of masculinity (Connell, 1995), with hypermasculinity falling under this umbrella. Hegemonic masculinity is a societal construct whereby individuals mould themselves to take on the most accepted form of masculinity within the culture they are imbedded within. More formally, Hearn and Morrell (2012) defined hegemonic masculinity as:

> 'A set of values, established by men in power that functions to include and exclude, and to organize society in gender unequal ways. It combines several features: a hierarchy of masculinities, differential access among men to power (over women and other men), and the interplay between men's identity, men's Ideals, interactions, power, and patriarchy.' (p.4)

Therefore, hegemonic masculinity encompasses any constellation of characteristics, including those considered non-toxic; for example, motivation to work to provide for family

or competitiveness in sports. In contrast, hypermasculinity exclusively captures the qualities of hegemonic masculinity that are socially destructive, including misogyny and violent domination (Kupers, 2001). In the western world, examples of this include the suppression of all emotional experiences except anger, unhealthy competitiveness, the degradation of women, an aversion to displaying weakness, and assertiveness (Sanchez-Lopez & Limiñana-Gras, 2017). This is used to explain how and why men maintain dominant social roles over women and other groups (Connell & Messerschmidt, 2005).

Ecological theory (Bronfenbenner, 1977) provides just one hypothesis for how hypermasculine traits develop. The theory suggests that both micro and macro level factors influence the propensity to which an individual will present with hypermasculine attitudes and behaviours. On a micro level, it is proposed that gender role expectations are learnt and enforced through observations of interactions, as well as experiences within interpersonal relationships (Bronfenbenner, 1979). On a macro level, hypermasculinity is also widely enforced by societies and cultures that adhere to traditional masculine norms (Harris, 2021). Tomkins's (1988) script theory has also been widely cited in the personality literature and delves into this macro factor in more depth. It posits that individuals develop a 'script' or set of rules that are positively reinforced over time. In the context of hypermasculinity, the model suggests that the script of 'the macho man' descends from the ideology of the warrior and the power dynamic that ensues following warfare (eg. victor and vanquished). It is hypothesised that over time, 'the macho man and his ideology of machismo mutually amplify one another '(p.3), with traits such as violence and sexual callousness reaping significant benefits back when resources were scarce.

In an environment characterised by danger, violence and competition, both prisoners and prison officers can present with hypermasculine attitudes and behaviours, functioning to display their power and dominance (Umamaheswar, 2020). However, whilst these attitudes and behaviours are often valued within this context, this can lead to the hypermasculine identity being idealised, which risks reinforcing the concealment of vulnerability, fear and displays of weakness (Karp, 2010; Spence et al., 2004). Though displays of courage and strength are important skills to possess as a prison officer, enabling these professionals to manage challenges on a daily basis, the discouragement of emotional expression and reluctance to seek psychological support when experiencing or exposed to trauma will only perpetuate pain and suffering (Wasylkiw & Clairo, 2018). The concept of help-seeking in this context will now be explored further.

Help-seeking

Help-seeking has been recognised as a complex decision-making process, requiring an individual to be aware of the problem and access the relevant channels in order to seek out support (Aguirre-Valesco et al., 2020). The concept has been more specifically defined in the literature as,

> '…the behaviour of actively seeking help from other people...it is about communicating
> with other people to obtain help in terms of understanding, advice, information,
> treatment and general support in response to a problem or distressing experience'
> (p.173; Rickwood et al., 2005).

Delaying help-seeking behaviours in individuals with a clinical need can have negative consequences, including a deterioration in mental state, a poor quality of life and even suicide (Hui et al., 2014; Sher, 2020). This concept has gained traction over recent years, as a vehicle for exploring and understanding the reasons why individuals may not seek out or access

support for mental health difficulties (Cornally & McCarthy, 2011).

Research exploring the relationship between gender and help-seeking has found that men are significantly less likely to seek out help for psychological difficulties in comparison to women (Mahalik et al., 2003), with conformity to traditional masculine norms accounting for the less favourable attitude (Addis & Mahalik, 2003). With the prison officer population being a male-dominated, hypermasculine profession with a high frequency of mental health issues (Kinman et al., 2016), it is imperative that attitudes towards and willingness to help-seek is fully understood. To date, only one recent study has explored the factors that impede help-seeking (Wills et al., 2021); with interviews being conducted with the friends and family members of prison officers who had died by suicide. As such, Wills et al.'s findings

regarding potential barriers to help-seeking were somewhat speculative, because they were not being highlighted by the prison officers themselves (the research conducted by Wills' et al. (2021) will be discussed in more detail in a subsequent chapter). There have not yet been any studies exploring the attitudes and views of prison officers from their own perspective; therefore, further research is required to develop an understanding of the barriers to help-seeking using the voices of prison officers.

Aims of the thesis

Research examining the social world of prison officers is somewhat limited, with exploration most frequently centred around the prisoner population. Existing literature exploring prison staff's experience of stress and burnout provides fruitful insights into the environmental and individual factors that contribute to its development, yet the extent to which prison officers are accessing support for these difficulties, and the factors that may be obstructing help-seeking in this population is not fully understood. Given that stress and

burnout in this profession significantly impacts on the quality of an individual's personal and professional life, understanding the causes and trajectory of the stress experience is considered important. Therefore, the aims of this thesis are two-fold. Firstly, to increase the knowledge base of the factors that cause or contribute to the development of stress and burnout in the prison officer population; and secondly, to develop a better understanding of the extent to which hypermasculinity is embedded within the prison climate, and whether this impacts on prison officers' willingness to seek help if they need it.

1. Chapter 2 presents a systematic review of the current literature on individual and environmental factors associated with stress and burnout in prison personnel. To address this, the review collated data from relevant research papers into themes and discussed their contribution to the burnout trajectory. The findings of the review are discussed, alongside implications and strengths and limitations.

2. Chapter 3 presents an empirical research study which aims to develop an understanding of prison officers' perceptions and experiences of help-seeking, and to explore whether hypermasculinity may act as a barrier to those who need wellbeing support but are not accessing it. A battery of measures were used in this research, namely, the Hypermasculinity Inventory (Mosher & Sirkin, 1984), The EssenCES Prison Version measure of social climate (Schalast et al., 2008), The Hospital Anxiety and Depression Scale (Snaith & Zigmond, 1984) and a specifically designed questionnaire to measure help-seeking. Descriptive statistics to identify the number of prison officers indicating clinical need for anxiety and depression is presented, as well as further investigations into the extent to which those that are struggling with their mental health are accessing support services, alongside other exploratory analyses. Finally, a regression analysis was undertaken to explore the relationship between hypermasculine attitudes and beliefs and

help-seeking. The findings of the study are discussed, alongside recommendations to address current processes, policies, and practices to improve the social climate and wellbeing of prison officer

3. Chapter 4 presents a critique of the Hypermasculinity Inventory (HMI; Mosher & Sirkin, 1984) – one of the first tools of its kind to measure a constellation of hypermasculine traits ('danger as manly', 'violence as exciting' 'callous sex attitudes towards women'), and a measure utilised in the current study (chapter 3). However, the measure is not without its limitations with regards to current utility, validity and reliability. The findings from the critique are discussed, alongside the importance of future research and the validation of newer, more up-to-date measures such as the Auburn Differential Masculinity Inventory-60 (ADMI-60; Burk et al., 2004).

4. Chapter 5 aims to draw together the findings from all the chapters and presents recommendations and implications for future practice in the social world of prison officers.

CHAPTER 2: SYSTEMATIC LITERATURE REVIEW

What are the individual and environmental risk factors associated with the

development of stress and burnout in prison personnel?

ABSTRACT

Workplace stress and burnout has been flagged as a salient health concern for individuals working in helping professions such as the prison service (Dowler, 2005; Maslach et al., 2001). As highlighted in chapter 1, due to the nature of the role, prison officers are at a high risk of occupational stress and burnout (Steiner & Wooldredge, 2015). Occupational strain can have a number of implications, both on an individual and organisational level; therefore, it is essential that the risks factors associated with the development of stress and burnout are identified and addressed. This paper is an extension of the work of Schaufeli and Peeters (2000) and Finney et al. (2013), who examined the organisational stressors associated with job stress and burnout. This review takes a slightly different angle, not only examining environmental factors, but also exploring the extent to which individual factors play a role in the development of occupational stress and burnout, as well as encompassing all prison personnel. Three systematic searches of the literature were conducted over two years, using Web of Science, PsycInfo, ProQuest, SCOPUS and PsycARTICLES. The papers extracted were screened for relevance, and then the remaining articles were screened for eligibility against the inclusion/exclusion criteria. Finally, 17 articles underwent a quality assessment using an adapted version of the AXIS tool (Downes et al., 2016). The results were presented in themes using Cooper and Marshall's (1976) model of job stress, which neatly

conceptualises five classifications of workplace-specific sources of stress within an organisation: Intrinsic to job, role in organisation, relationships at work, career development, and organisational structure and climate. The factors associated with burnout included communication, supervisory support, and job autonomy, which suggested that these environmental aspects should receive careful attention during the review of organisational structures and processes, as well as in the development and delivery of future interventions.

Amongst the individual factors, a relationship existed between stress and age, and burnout and length in service. Extraversion and neuroticism were also found to be associated with burnout symptoms; however, there was limited research examining the role of personality factors; therefore, no concrete conclusions could be drawn. The limitations of this review were addressed, alongside clinical implications. Areas for further research were identified throughout.

INTRODUCTION

Occupational stress and burnout

Since the concept of burnout was first established and developed, its lack of self-containing diagnosis in the diagnostic handbooks has caused inconsistencies in its definition. Due to the overlapping symptoms between burnout and other mental health issues such as anxiety and depression, research has shown that professionals are more likely to overlook burnout as its own self-contained diagnosis (Korczak et al., 2010). Burnout was initially conceptualised as being a syndrome of the 'helping 'professionals but was subsequently recognised as having a wide-ranging trajectory affecting all professions (Maslach & Leiter, 2016). As touched on in chapter 1, burnout has been described as an individual's relational crisis with their occupation (Maslach et al., 2001), with a recognition that it is most common amongst individuals who undertake 'people work' (Maslach & Jackson, 1982). Maslach and Jackson's (1982) multifaceted model of burnout is the most widely cited conceptualisation of burnout (Maslach & Leiter, 2016), consisting of emotional exhaustion, depersonalisation and a reduced sense of personal accomplishment (Schaufeli et al., 2009).

Maslach and Jackson (1982) suggest that burnout develops over time, with emotional exhaustion being the central feature of the triad. Additionally, emotional exhaustion has been conceptualised as the symptom that emerges first; therefore, if its development is identified timely enough, it is deemed a pivotal point to employ an early intervention. Individuals who present with excessive emotional exhaustion experience job demands significantly greater than others, with demands excessively outweighing their emotional and psychological resources (Maslach, 1986). It has long been recognised that emotional exhaustion and physical health are closely linked, impacting the person on an individual level. However, research has recognised that this also risks a macro level impact on organisations too (Cropanzano et al., 2003), with staff who experience high emotional exhaustion more

frequently experiencing mental health related absences and subsequent resignation from the role (Aarons et al., 2009). Developing accessibility to internal and external resources, regular use of coping techniques and regulation of emotional labour are factors cited in the literature that are known to mitigate the impact of emotional exhaustion (Michielsen et al., 2004).

Emotional labour in particular has become more salient in the occupational health literature. It refers to the ways in which an individual is selective about the types of emotions they choose to display in a given context to remain in accordance with collective norms, regardless of their authentic emotional state (Hochschild, 1983). This often involves concealment or amplification of certain emotional expressions, and the effort used to do this was coined emotional labour (Sturdy, 1992). This model proposes that for professionals operating in an environment such as prison, where the macho culture encourages the suppression of emotions considered weak (for example, fear and vulnerability), this causes employees to become 'estranged' from their true self, because they are obligated to operate in a way that is misaligned with their actual emotional experience (Søgaard & Krause-Jensen, 2019). The impact of stress and burnout and the links to hypermasculinity in the prison officer population is explored in more depth in chapter 3.

The second dimension of burnout is depersonalisation, which is perceived as a by-product of emotional exhaustion. This is characterised by a heartless, negative, and detached response, with employees experiencing burnout frequently adopting a dehumanising approach to the care of clients (Schaufeli et al., 2009a). For staff working in 'people professions', investing empathetically into the care of others frequently generates high levels of emotional exhaustion, which typically results in a psychological withdrawal from those around them (Schaufeli et al., 2006). If this is experienced over an extended period of time, professionals can experience compassion fatigue, in which they no longer have the capacity

to offer the client authentic concern. Although they may continue to care *for* the client, depersonalisation means that they may cease to care *about* them (Killian, 2008). For example, when professionals are emotionally detached, their interactions are likely to be perceived as cold and callous, impacting negatively on the quality of a service.

High levels of emotional exhaustion and depersonalisation can lead to the development of a reduced sense of personal accomplishment. This represents the self-evaluation dimension of burnout and is frequently activated in response to feelings of incompetence, low confidence and a negative view of working with service users (Maslach & Leiter, 2016; Maslach et al., 2001). This factor is unique, in the sense that it most often emerges as a result of more specific organisational problems related to a lack of resources (eg. short staffing); on the contrary, the other two dimensions are more closely linked to interpersonal pressures (Schaufeli et al., 2017). On the whole, burnout can be highly destructive, not just to the person experiencing it, but also to colleagues and the clients in their care (Wlodarczyk & Lazarewicz, 2011).

Burnout does not just have psychological effects but can also increase the risk of physiological symptoms and psychosomatic disorders, including dizziness, headaches, insomnia, migraines and cardio-respiratory issues (Angerer, 2003). Whilst it is not uncommon for these health problems to exist without the presence of mental health issues, these physical symptoms are often observed alongside acute clinical disorders such as anxiety, depression, OCD, paranoia and substance misuse (Esch et al., 2002). Research has highlighted both the short- and life-long psychosomatic repercussions of burnout, emphasising the need for organisations to prioritise the wellbeing of their staff, and to be committed to developing an understanding of how to prevent and treat burnout.

Stress and burnout amongst the prison personnel population

Workplace stress and burnout have been flagged as a major health concern within the working population; however, they are a particularly salient issue for individuals working in helping professions (Dowler, 2005; Maslach et al., 2001; Xanthakis, 2009). Prison personnel, and particularly prison officers, are frequently working long shifts and are required to be on hand to manage critical incidents relating to violence, self-harm, and substance misuse. Based on the responses from 25,000 participants in the UK, Johnson et al.'s (2005) study comparing the experience of job stress across a diverse range of occupations found that prison officers reported worse than average scores for physical health, psychological wellbeing, and job satisfaction. This is likely due to exposure to an array of occupational risk factors resulting from the aforementioned expectations of their role that can threaten their wellbeing and self-efficacy. This is supported by statistics presented by the Ministry of Justice (2019b), which spotlights the rising number of incidences of violence each year. UK statistics evidence a high number of assaults on prison staff in 2019 (10,059), with 966 of these classified as serious assaults (serious assaults are defined as any of the following: a sexual assault; inpatient hospital admission; concussion or internal injuries; fracture, burn, stab, extensive bruising, broken tooth, cuts, bites, temporary or permanent blindness). Officers are also required to manage a high level of prisoner-on-prisoner violence, with 33,222 assault incidents recorded in 2019 alone (Ministry of Justice, 2019a). On an organisational level, the number of individuals experiencing work-related stress and burnout could jeopardise the safety and security of UK prison systems.

Implications of stress and burnout in prison personnel

The impact of environmental stressors can be detrimental, as it decreases the buffering effect of individual characteristics known to protect against stress and burnout

(Crank et al., 1995). Research has shown that workplaces that have higher numbers of emotionally exhausted staff are more likely to report higher incidences of work absence, and significantly lower levels of psychological attachment to their organisation, also known as organisational commitment (Bourbonnais et al., 2007; Schat & Frone, 2011). The negative correlation between organisational commitment and job satisfaction has shown to play a significant role in employee's intentions to resign from their place of work (Matz et al., 2013); and with high turnover levels perpetuating the cycle of understaffing and overworking, the impact on an organisational level is extensive.

Stress and burnout are becoming an increasing concern for organisations managing prison personnel. The body of literature on this topic has expanded in recent years, with a significant proportion of the studies focusing their research on environmental antecedents (Griffin et al., 2012). However, the literature has also began to recognise that individual characteristics may also play a role in the developmental trajectory of burnout amongst this profession.

METHOD

Existing Reviews

To justify this review, three literature scopes were conducted over a 2-year period. An initial scope was conducted on 1st March 2020 and an updated search on 3rd December 2020, to identify any previous literature reviews that explored a similar question. A final updated scope was conducted on 24th March 2022, to detect any recently published reviews and papers in this area. All three scopes were conducted through the following academic databases: Cochrane Database of Systematic Reviews, Web of Science, PsycInfo, SCOPUS PsycARTICLES and Google Scholar. Three literature reviews were found pertaining to a similar review question (Finney et al., 2013; Page & Roberson, 2021; Schaufeli & Peeters,

2000).

Schaufeli and Peeters (2000) conducted a systematic review to explore the job stressors experienced by prison staff. The paper presents an aggregate review combining various prison roles and reported 10 psychosocial risk factors for developing stress and burnout, namely: lack of autonomy; inadequate pay; underutilisation of knowledge and skill; lack of variety; uncertainty; health and safety risks; demanding social contacts; role problems; poor social status; and high workload. The latter three were considered the most strongly associated risk factors for developing stress reactions.

An updated literature review by Finney et al.'s (2013) limited their findings to the prison officer population and identified several other factors relating to the structure and climate of the organisation that were not identified in Schaufeli & Peeters (2000) review, including poor decision-making, vague goals and policies, and lack of organisation support and justice. Other stressors relating to job role and supervisory support evidenced inconsistent findings. Both reviews emphasised the role of systemic-level intervention strategies to target relational and professional domains to improve the work environment and reduce burnout levels.

The updated literature scope highlighted a recently published review conducted by Page and Roberson (2021), who examined factors associated with work-related distress (WRD); however, their review focused exclusively on the community officer population (eg. Parole and Probation Officers). As such, due to the demands of different forensic settings, community officers are likely to have significantly different roles and responsibilities in comparison to prison personnel; therefore, it is possible that there is a different constellation of factors associated with burnout, dependent on the occupational setting. Finally, although

29

the review aims were exploratory in nature, examining the psychosocial factors associated with WRD, it specifically focused on the effects of indirect trauma, providing a slightly different direction to other reviews outlined in this area.

Current Review

There are a number of reasons why an updated review has been deemed necessary. Firstly, Her Majesty's Prison and Probation Service (2020) adopt the perspective that burnout is more likely to occur when there is a mismatch between the essence of the job and the nature of the individual undertaking the job. Existing reviews centre their data synthesis exclusively on extrinsic, organizational, factors that underpin the development of stress and burnout (Finney et al., 2013; Schaufeli & Peeters, 2000). Since Finney et al.'s (2013) review, more recent research has shed light on other risk factors such as training quality and fear of victimisation that were not previously examined. However, despite this review highlighting less well-known burnout contributors, the paper was not able to make any conclusive statements regarding the relationship between organisational factors and stress and burnout, with a major disadvantage being that a considerable number of the studies included did not measure burnout directly using a validated measure (Finney et al., 2013).

Additionally, the two existing reviews focused on the prison officer population and provide limited consideration to other prison personnel (Finney et al., 2013; Schaufeli & Peeters, 2000). Despite the majority of studies examining the stress responses of prison officers, there are other frontline prison employees, such as healthcare professionals, who are operating in the same high stress environment, but whose experience is so often neglected (Keinan & Malach-Pines, 2007). Consideration of the potential internal factors that interplay, will enable a more comprehensive understanding of the individual features that impact on daily functioning, and contribute to job stress and burnout in different frontline professionals.

30

This review aims to improve methodologically on existing reviews, as well as explore up to date research examining factors associated with stress and burnout in prison officers and other prison personnel, to identify any new factors emerging that can inform interventions and organisational processes. An updated awareness of the stressors that play a role in increasing occupational strain and burnout would provide a springboard for the improvement and development of individual and organisational interventions that can more precisely target specific problem areas; subsequently creating healthier employees and a more positive work environment.

Since a significant period of time has elapsed since the last review, an update is required. This systematic review intends to synthesise more up to date research in this area, whilst also homing in on individual as well as organisational level factors, to ensure interventions to support staff wellbeing are kept relevant and driven by the most current evidence (Pieper et al., 2014). The current review uses the Centre for Reviews and Dissemination (CRD, 2009) and the PRISMA framework for guidance to ensure transparent and complete reporting of the screening process (Page et al., 2021).

Aim of Review

To determine what individual and organisational factors are associated with the development of stress and burnout in prison personnel.

Scoping Search

A preliminary scoping search was conducted on the 1st March 2020 to identify relevant publications and to establish an approximate number of papers relevant to the review. The scope was conducted using:

- Web of Science

- PsycInfo

- ProQuest

- SCOPUS

- PsycARTICLES

The same search syntax was applied to every database. Where possible, the initial search used the terms below, alongside: "factor*" OR "predictor*" OR "associat*" OR "correlat*". However, this was disadvantageous to the scope because it hindered the detection of relevant papers. To address this, search terms included Boolean operators "AND", as a way to join search items and narrow the search, and "OR" to broaden the search to any connected terms.

Search Terms

The search terms were as follows:

"correction* officer*" OR "prison officer*" OR "prison staff" OR "correction* staff" OR "prison worker*" OR "correction* worker*" OR "prison guard*" OR "jail staff" OR "correction* personnel" OR "prison personnel" OR "operational staff" OR "non-operational staff" OR "civilian staff"

AND

"stress*" OR "distress" OR "job stress*" OR "work stress" OR "environment* stress" OR "burnout" OR "chronic stress" OR "emotion* exhaust*" OR "compassion* fatigue" OR "mental well*" OR "mental health" OR "psychological adjustment" OR "mental adjustment" OR "occupational stress" OR "depersonal*" OR "fatigue" OR "psychological adjustment".

A grey literature search was also conducted using the google scholar search engine and a general google search, to identify any unpublished papers or doctoral theses. Grey literature search is considered to be an important stage of conducting a systematic literature review, as it helps to avoid positive results publication bias, and identify research that may

have been missed during the formal literature scope (Boland et al., 2017).

Screening and Study Selection

Following the completion of the database searches, references were exported to EndNote reference management software. From the above searches, 100 hits were found from SCOPUS, 58 from Web of Science, 393 from ProQuest and 76 from psycINFO and psycARTICLES (through OVID search engine). Following the removal of duplicates, the author was left with 358 papers. The PICO framework was used to outline the parameters for screening and selection, and titles and abstracts were screened for relevance using the inclusion/exclusion criteria.

Table 1: Inclusion/exclusion criteria

	Inclusion	**Exclusion**
Population	Prisoner-facing personnel	Individuals working in the prison environment but are not prisoner-facing (eg. Administration, human relations, IT)
Intervention / Exposure	Individual and environmental factors	
Comparator	No comparator	Not applicable
Outcome	The variables associated with stress and burnout.	Prisoner stress, prisoner mental health, effects on prisoners
Language	English	Non-English language papers were excluded due to lack of resources and time restrictions to translate.

Other	Year of publication after 2007 to reduce number of papers overlapping with a 2013 SLR, but to ensure relevant studies to this specific question are still used Published papers Unpublished papers	Year of publication before 2007 Case studies News articles
Study design	Quantitative and qualitative study designs Prison personnel must complete a validated measure of stress / burnout Can be published or unpublished to avoid publication bias	Review papers Book review
Setting	Prisoner-facing personnel working in a prison	A group who are not working in a prison (eg. Probation, parole, detention centre).

Figure 1: PRISMA flow diagram of the study selection process
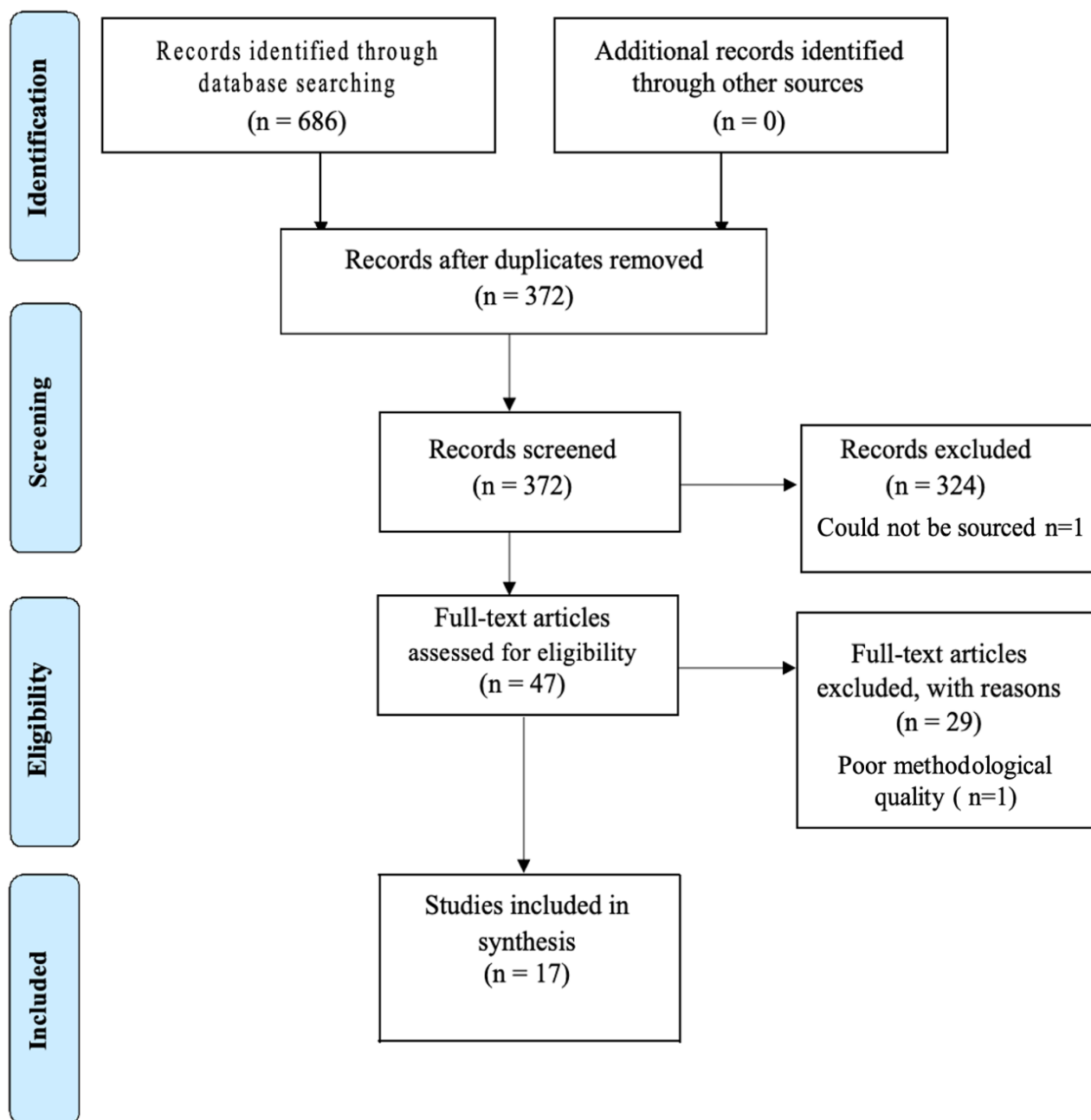
Quality Assessment

Following screening and selection, a final search of the reference lists of eligible studies was conducted to reduce the risk of omitted relevant research papers. Next, the methodological quality of the quantitative papers was assessed. Numerous quality assessment tools were considered for use; however, there was a limited selection designed to specifically appraise cross-sectional studies. One tool that was considered was the ROBINS-I; however, exploration into its application raised concerns regarding the tool's validity, and particularly the risk of bias (Losilla et al., 2018). Furthermore, the ROBINS-I is most frequently used for cohort studies, and as such, has been critiqued for being too generic and unable to capture the specificities of cross-sectional designs (Downes et al., 2016). As such, it was decided that an adapted version of the AXIS tool would be most appropriate (Downes et al., 2016). All but one of the questions used were unmodified, with the exception being the statement referencing the representative nature of the sample. This item was amended to make specific reference to the target population (prison personnel), as opposed to a more generalised statement; however, the nature of the question was kept the same.

The AXIS Additional items extracted from Finney et al.'s (2013) quality assessment tool were also used to ensure specific objectives were met (see Appendix A). For example, outlining participant consent is considered an integral part of conducting research (Sil & Das, 2017), yet the AXIS did not include an item addressing this. Subsequently, a question was included as part of the quality assessment process. A 'partial' option was added to allow the assessor flexibility where items have only been partially met. Two papers were removed from the review – the first could not be sourced by the British Library and the other showed poor methodological quality, raising questions about the validity of the findings and increasing the risk of bias. It is important to note that the AXIS tool does not provide a cut-off point for which to remove low quality papers; therefore, it was agreed that papers scoring below 50%

on the quality assessment tool justified exclusion, as this would indicate significant flaws in the methodological rigor and was unlikely to provide reliable contribution to the review. Only one paper was excluded due to low methodological quality. Four papers were randomly selected using a Microsoft Excel formula and independently assessed by a second rater (Forensic Psychologist in training) for interrater reliability. Any discrepancies with regards to the ratings were discussed until an agreement was reached. Three of the four papers received a 100% agreement for the quality assessment statements, and one paper had an inconsistency on one question, yielding a 90% agreement total. This was then re-examined and considered until both raters deduced the same score. The quality assessment score for each paper is displayed in Table 2.

Data Extraction

A data extraction form was developed (Appendix B) based on The National Institute for Health and Care Excellence (2016) guidelines to systematically extricate relevant information from remaining papers. Key information was extracted, including study characteristics, design, sampling process, data collection, data analysis, results, conclusions and application of findings. Table 2 presents a summary of the synthesised data from the 17 studies.

Table 2: *Key information extracted from studies*

Author(s)	Study location	Study design	Participants	Outcome measures	Key Findings	Quality assessment score
Akbari et al. (2017)	Iran	Cross-sectional design	171 Male prison employees	The Health and Safety Executive Tool (UK Health and Safety Executive, 1990)	MANOVA: negative significant relationship between JDC model and job stress. Prison staff experienced considerably high level of psychological pressure due to a high workload and low decision latitude.	85%
Clements & Kinman, (2021)	UK	Cross-sectional design	1792 prison officers (87.3% Male, 97.4% white)	abbreviated Maslach Burnout Inventory Emotional Exhaustion (EE) dimension only (aMBI; Maslach, Jackson & Leiter, 1996)	Regression analysis. As EE increased, distributive justice** and interactional justice** decreased. Workload positively associated with EE. Violence positively associated with EE. Personal experience of aggression was not associated with EE.	88%

| Garland et al. (2013) | USA | Cross-sectional design | 160 prison employees (59% Male) (62% prison officers, 38% in other areas) | Combined items from two validated measures (Occupational Stress Inventory; Ospiow & Spokane, 1987; and measure of role conflict and ambiguity) | Pearson's correlation: As age increased, job stress decreased. The more role stress, the lower the supervisory support, supervision, autonomy, communication, integration, input into decision making. Prison officers' had a higher level of job stress than other employees. OLS regression: 52% of variance in job stress explained by supervisory support, lack of autonomy and poor communication. | 72.5% |

| Keinan & Malach-Pines (2007) | Israel | Cross-sectional design | 496 prison employees | The Burnout Measure (short version; Pines & Aronson, 1988) and a piloted Stressors questionnaire | One-way ANOVAs: Role variables: Men were significantly more stressed than women. The more years in service, the higher the stress levels experienced. Commanding officers significantly less stressed than lower ranking officers (P<.01). Overtime without payment, low salary, high workload and slow promotion were the most stress inducing factors and significantly correlated with stress. Treatment team had highest overall stress level. Significant difference in burnout and stress between treatment and security teams (p < .05). COs experience significantly more burnout and stress-related symptoms compared to treatment staff (p<.05). Security team more stressed by possible harm, lack of interest by superiors regarding personal needs as well as the above. Treatment team were significantly more stressed by balancing work and family needs. | 67.5% |

| Lambert et al. 2021 | Nigeria | Cross-sectional | 120 prison officers (68% Male, 30% in a supervisory role) | Job stress measure from Cullen et al., (1985) | OLS Regression: increase in strain- and behaviour-based conflict showed significant increase in job stress. No relationship was observed between time- and family- based conflict and job stress. | 88% |
| Lambert et al. (2009a) | USA | Cross-sectional design | 272 participants - 76% men, 50% prison officers | Maslach Burnout Inventory (Maslach & Jackson, 1981) | OLS Regression: More tenure = role stress. Non-custody staff were more likely than custody staff to report role stress. Input into decision-making had a negative association: The more input a person had into organisational and job-related decisions, the less role stress they reported. Integration strongest negative association with role stress, then formalisation**, input into decision making, supervision, communication. | 82.5% |

| Lambert et al. (2016) | USA | Cross-sectional design | 160 prison employees 59% men (mean age 37.5) 79% non-supervisors | The Job Stress Scale (Crank et al., 1995) | Pearson's correlation: Tenure**, supervisory support, and coworker support had significant correlations with job stress. Increases in tenure are associated with higher levels of stress. Increases in all support are related to lower reported stress. Gender, age, and position had non-significant correlations with job stress.

OLS regression: IVs explained 35% variance of job stress: Only 2 significant relationships were administrative support and supervisory support with job stress. | 67.5% |

| Lambert et al. (2007) | USA | Cross-sectional design | 272 prison employees (76% male, 50% officers) | The Job Stress Scale (Crank et al., 1995) | Pearson's correlations: As age and tenure increased, so did job stress. As dangerousness and role stress increased, so did job stress. Job stress decreased as job variety, timely job feedback and positive experience of supervision increased. OLS regression: 30% of variance explained by IVs. gender and age had statistically significant effects on job stress (women higher than men). Role stress had the greatest impact on job stress, followed by dangerousness. | 57.5% |
| Lambert et al. (2009b) (I am fried) | USA | Cross-sectional design | 160 prison employees (62% prison officers; 22% supervisors; 59% male). | Maslach Burnout Inventory (Maslach & Jackson, 1981) | OLS regression: association of work factors with burnout controlling for personal characteristics. Work factors explained 46% variance in burnout. As tenure increased, burnout significantly increased. As role ambiguity and role overload increased, burnout significantly increased. Role conflict, perceived dangerousness and inmate contact were all non-significant. | 62.5% |

| Lambert et al. (2020) | USA | Cross-sectional design | 322 prison employees (68% prison officers; 26% males; mean age 40) | Cullen et al.'s (1985) Work Stress Measure (validated by Higgins et al., 2013) | Pearson's correlations: Individual characteristics: the higher the role ranking, the higher the job stress. Correctional officers experienced higher work stress than staff in other positions. The greater the input into decision-making, the less stress; the higher the quality of supervision, the less stress; the higher the training quality and role clarity, the less stress. Both job demand variables were significant – the higher the workload and fear of victimisation, the higher the job stress. OLS regression: Variables explained 32% of variance. None of the personal characteristics were statistically significant. Input into decision-making and quality of supervision were both significantly associated to job stress. Instrumental communication, training views, and role clarity were non-significant. | 90% |

| Paoline et al. (2015) | USA | Cross-sectional design | 912 prison employees (54% men; 67% prison officers) | The Job Stress Scale (Crank et al., 1995) | Pearson's correlation: Female officers more likely to report job stress compared to other female staff. All organisational stressors significant correlation to stress: Increases in role ambiguity, role conflict, and perceived dangerousness of the job were all associated with higher stress levels. The lower the instrumental communication, the higher the job stress. The more negative the pay perceptions and coworker relations, the higher the job stress. The greater the input into decision making, job variety, views on inmate control, and administrative support, the lower the job stress.
Male officers in supervisory positions were significantly less stressed compared to those in nonsupervisory roles, while more experienced staff (tenure) were more stressed on the job. Female correctional officers reported greater stress from the job than did men in the same role. OLS regression: For Female staff, factors explained 47% of variance. Personal characteristics: tenure, supervisory status, and position all had a significant association with the job stress. Organisational variables: role ambiguity, perceived dangerousness, coworker relations, input into decision making, and administrative support had significant associations. | 75% |

45

women but not for men. Role ambiguity, perceived dangerousness, co-worker relations, input into decision making, and administrative support had larger effects on job stress for women compared to men. Relations with co-workers had a slightly stronger negative association with job stress for men than it did for women.

Setti & Argentero, (2015)	Italy	Cross-sectional design	108 prison officers (mean age = 39)	The Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli et al., 1996) Stressors questionnaire (Keinan & Malach-Pines, 2007)	Pearson's correlation: as stressful contact within inmates increase, so does levels of EE and DP. ANOVA: older COs (aged over 45) higher exhaustion compared with younger ones, (less than 33; (F=4.44, p<.05). stressful contact with inmates has the most significant influence on emotional exhaustion (Beta=.411, p<.01) and depersonalisation (Beta=.351, p<.01).	60%
Steiner and Wooldredge (2015)	USA	Cross-sectional design	1082 prison officers	Validated work stress measure from Cullen et al. (1985) and Lambert & Paoline, (2005)	OLS regression: factors explained 37% of variance. Strongest association with work stress included role ambiguity, perceived dangerousness, and perceived adequacy of time to meet job demands. Environmental factors: As job demands (inadequate safety and time to meet job demands) increase, so does work stress. As role ambiguity and supervisory role increase, so does stress. As co-worker and supervisory support increases, job stress decreases. As workplace safety issues increased, so does work stress.	92.5%

| Hu et al. (2015) | China | Cross-sectional design | 2185 prison officers (81.9% male) | The MBI-GS; Schaufeli et al. (1996) | Chi Square: Relationship exists between burnout and age, sex, job rank, working hours, work shift, perceived threat and all occupational stress factors. OLS Regression: The strongest positive effect for EE, CY and PE was high job effort and the strongest negative effect was high reward. | 90% |

| Harizanova et al. (2018) | Bulgaria | Cross-sectional design | 307 prison officers (68% male) | Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) | Extraversion, neuroticism and psychoticism all correlation with burnout subscales. The lower the extraversion, the lower the personal accomplishment; the lower the extraversion, the higher the emotional exhaustion and level of depersonalisation.
As neuroticism increases, emotional exhaustion and depersonalization increases. As neuroticism increases, personal accomplishment decreases. Multiple regression: 40% of the variance in emotional exhaustion was explained by high neuroticism and low extraversion. The high level of neuroticism was the factor that had the most significant influence on emotional exhaustion. 38% of variance in depersonalisation explained by all 3 personality dimensions. | 77.5% |

| Lovell & Brown (2017) | UK | Cross-sectional design | 330 prison officers (59% male) | Maslach Burnout Inventory Human Services Survey (MBI-HSS) | Point-Biserial correlation: positive correlation between gender and depersonalisation (females higher on depersonalisation). The higher the extraversion, the lower the emotional exhaustion. The higher the neuroticism, the higher the emotional exhaustion. As agreeableness and conscientiousness increases, sense of personal accomplishment increases. As extraversion increases, sense of personal accomplishment increases. As neuroticism decreases sense of personal accomplishment increases. The higher the agreeableness, the lower the levels of depersonalisation. Hierarchical regression: agreeableness significantly associated iwth depersonalisation, neuroticism significantly associated with emotional exhaustion and sense of personal accomplishment. | 88% |

| Oliveira et al. (2015) | Brazil | Cross-sectional design | 339 prison employees (81.9% male) | Portuguese version of the MBI-GS (Schaufeli et al., 1996) | ANOVA: Females and employees working 10+ years (tenure) presented higher levels of EE. Prison escort and surveillance agents and prison officers' higher levels of EE than health professionals. Prison officers had had higher cynicism scores than prison escort and surveillance officers. | 77.5% |

**Key definitions, abbreviations and acronyms:
JDC: Job-Demand-Control **OLS:** Ordinary Least Squares **ANOVA:** Analysis of Variance **COs**: Correctional officers **CY:** cynicism **PE:** Professional efficacy
Distributive Justice: refers to the fairness of rewards (eg. fair pay in comparison to colleagues) **Interactional justice:** refers to the treatment of employees (eg. respect).
Formalisation: refers to the use of well-defined rules and regulations to guide individuals within an organisation. Eg. training, employee handbooks, policies.
Tenure: refers to the duration of time in which an individual remains in their job.
PA: personal accomplishment **EE:** emotional exhaustion **DP:** Depersonalisation

Description of studies

The initial scope yielded 686 hits, 314 of which were duplicates. Of the remaining 372, the screening process identified 47 papers that seemed relevant to the review question. The remaining 47 articles were accessed in full, to assess whether they met the inclusion criteria. Following this process, 14 articles were deemed suitable for the current review. The updated scoping exercise was conducted to identify any newly published research, filtering records for 2021 and 2022 only. This retrieved 134 papers, with a total of 107 papers left following removal of duplicates. These papers were screened, and 91 were excluded. 16 were assessed for eligibility and 13 were excluded, leaving 3 relevant studies to be incorporated into the data analysis.

REVIEW CHARACTERISTICS

Participants

The majority (n = 8) of the included studies came from a USA sample, with the remaining studies conducted in different regions of the world, including the UK, Italy, Bulgaria, Brazil, China and Iran. The total sample for all papers included in this review was 8858, with individual samples ranging from 108 to 2185 (mean n = 540.47). From what can be ascertained, two of these studies used the same data for their analysis (Garland et al., 2013; Lambert et al., 2016). Where small sample sizes were used, the authors accounted for this during the data analysis and it was a discussion point when considering limitations.

Study Design and Outcome Measures

All 17 studies used a cross-sectional design and therefore did not implement an intervention. Included studies measured an array of individual and environmental factors that

52

were anticipated to be associated with stress and burnout. All of the articles considered the role of different demographic characteristics (age, gender, rank, tenure, supervisory status, job position) within their analysis. Of those focusing on individual factors, two studies exclusively examined the role of personality characteristics (Harizanova et al., 2018; Lovell & Brown, 2017) and another focused their analysis specifically on gendered effects (Paoline et al., 2015). The remaining thirteen studies examined a battery of environmental factors.

Seven studies exclusively measured burnout as their outcome variable, eight studies exclusively measured job stress and one study measured both role stress and burnout. A variety of measures were used to assess work-related stress and burnout, with the most prevalent being a version of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1988; Schaufeli et al., 1996). Other tools used included the Job Stress Scale (Crank et al., 1995), Occupational Stress Inventory (Osipow & Spokane, 1987), the Health and Safety Executive tool (Health and Safety Executive, 2004) and other validated work stress measures (Cullen et al., 1985; Lambert & Paoline, 2005).

Eight of the 17 studies implemented either the Maslach Burnout Inventory (Maslach, et al., 1986), the Maslach Burnout Inventory   General Survey (Schaufeli et al., 1996) or the Maslach Burnout Inventory- Human Services Survey (Maslach & Jackson, 2016) as an outcome measure for assessing the experience of burnout in the sample populations (Harizanova et al., 2018; Hu et al., 2015; Keinan & Malach-Pines, 2007; Lambert et al., 2009a; Lambert et al., 2009b; Lovell & Brown, 2017; Oliveira et al., 2015; Setti & Argentero, 2015). Clements and Kinman (2021) used an abbreviated MBI, which exclusively used the emotional exhaustion measure. In brief, the MBI is the most widely used introspective psychological assessment instrument pertaining to occupational burnout

(Poghosyan et al., 2009). The scale is underpinned by a strong theoretical model and has good psychometric properties (Maslach & Jackson, 1981). The MBI is designed to measure the 3 dimensions of burnout: Emotional Exhaustion, Depersonalisation and Personal Accomplishment.

Jackson et al. (1986) validated the MBI tool by mapping scores against behavioural ratings provided by other professionals (Jackson et al., 1986). The Maslach Burnout Inventory   General Survey (MBI-GS) was designed to assess the existence and extent of burnout amongst staff in more general occupational groups, outside of human services and education. Accordingly, the MBI-GS burnout dimensions are more broadly defined, with the tool measuring Exhaustion, Cynicism, and Professional Efficacy. Research has also supported the existence of this three-factor model that can be applied to any occupational context (Richardsen & Martinussen, 2005).

One study used the Burnout Measure Short Version (BMS; Keinan & Malach-Pines, 2007), a less frequently used measure of burnout (Pines & Aronson, 1988). The tool includes 10-items that measure levels of physical, emotional, and mental exhaustion of the individual. The BMS has been shown to be a reliable and valid research instrument, with internal consistency coefficients around .85 (Pines, 2005). Another study used a UK government tool called the Health and Safety Executive (HSE) indicator tool   a 35-item questionnaire measuring the six primary stressors identified that have been considered important in tackling work-related stress. These include demands, control, support relationships, role and change. The measure has been validated and reliability assessed where the results were deemed statistically acceptable ($\alpha = 0.78$ and Spearman-Brown coefficient = 0.65; Azad & Gholami, 2011).

Finally, three articles used a Job Stress Scale (Lambert et al., 2016; Lambert et al., 2007; Paoline et al., 2015) developed by Crank et al. (1995). This validated tool contains five subscales that have been designed to assess occupational stress associated with workload, role conflict, job responsibilities, quality concerns and job vs. non-job conflict (Ahmad & Roslan, 2016). It uses a two-item index score that ranged from 2 (low level of stress) to 10 (high level of stress). The measure examines a direct emotion–workplace connection, by asking the participants the extent to which they agreed with the statements (Eg. "My job places me under a lot of pressure.") The responses for each question ranged from strongly disagree (coded 1) to strongly agree (coded 5). The measure has evidenced excellent internal consistency ($\alpha = 0.82$; Crank et al., 1995). The remaining studies used measures that are not as well-established as the aforementioned but remain validated measures of role stress and burnout. These include the Work Stress Measure (Cullen et al.,1985; Lambert & Paoline, 2005) and Occupational Stress Inventory (Ospiow & Spokane, 1987).

Quality

The quality of the 17 papers ranged from 57.5% (Lambert et al., 2007) - 92.5% (Steiner & Wooldredge, 2015). Threats to quality across the studies were principally related to sampling bias and a lack of consideration to address and categorise non-responders. Specifically, the frequent use of random and opportunity sampling across the studies indicated that prison personnel on holiday or sick leave were overlooked and not awarded the option to participate. All the studies analysed presented a clear introduction and aim, with the exception of Lambert et al.'s (2009) paper, where the hypothesis was briefly mentioned, but lacked further reference to the study aims. All the papers suitably selected a cross-sectional design which aligned with the study aims, and the independent and outcome variables

measured were appropriate.

With regards to sampling, numerous studies presented with significant methodological issues (Garland et al., 2013; Lambert, 2007; Lambert, 2016; & Setti & Argentaro, 2015). All four studies collected data from only one prison; therefore, the results may reflect the climate of that specific institution and cannot be generalised to the wider prison population. The authors made no reference to power and provided no justification of the sample size, which is particularly significant for Setti and Argentaro's (2015) research, having had the smallest participant number of all the papers. Finally, five studies recruited through convenience sampling which poses a significant risk of self-selection bias (Garland et al., 2013; Lambert, 2007; Lambert, 2016; Lovell & Brown, 2017; & Setti & Argentaro, 2015). Only three of the sixteen studies provided justification for sample size using a power analysis (Lambert et al., 2009; Lambert et al., 2021; Steiner & Wooldredge 2015), and only four implemented measures to address non-responders (Lambert et al., 2020; Lambert et al., 2009a; Paoline et al., 2015; & Steiner & Wooldredge, 2015), which included sending follow-up emails and collecting data across numerous days to reach those working different shift patterns.

Positively, all the studies analysed appeared to score consistently better on the quality assessment tool for the results section of the paper. However, most studies failed to make reference to confounding variables. Whilst most researchers controlled for confounders in their analysis, this was not discussed in the write up (Clements & Kinman, 2021; Harizanova et al., 2018; Lambert et al., 2021; Lambert, 2016; Lambert, 2009a; Lambert, 2009b; Paoline et al., 2005; Setti & Argentero, 2015; Steiner & Wooldredge, 2015). Finally, the majority of studies provided an adequate summary of the study limitations, and areas for improvement

for future research. This was with the exception of two studies (Garland, 2013; Lambert, 2007), who gave no consideration to the limits of their paper, as well as Harizanova et al. (2018), who considered potential limitations, but not in sufficient detail.

Statistical tests

Twelve out of the 17 papers analysed their results using Pearson's correlation and/or Ordinary Least Squares (OLS) Regression (Clements & Kinman, 2021; Garland et al., 2013; Lambert et al., 2009a; Lambert et al., 2009b; Lambert et al., 2016; Lambert et al., 2007; Lambert et al., 2020; Lambert et al., 2021; Paoline et al., 2015; Steiner & Wooldredge, 2015; Harizanova et al., 2018; Lovell & Brown, 2017). Pearson's correlation coefficient is limited to measuring the strength and direction of two variables (Schober et al., 2018), whereas the regression analysis allows for the explanation of variables on the outcome variable (Palmer, 2009). Four studies used Analysis of Variance (ANOVA) including post-hoc tests to compare significant differences between groups split by individual characteristics (Akbari et al., 2017; Keinan & Malach-Pines, 2007; Oliveira et al.,2015; Setti & Argentero, 2015;). Hu et al. (2015) also employed a Chi-Squared test to identify significant relationships between individual characteristics.

In terms of the Regression Models, all reported to be a good model fit, with explained variance ranging from 30% - 54.5%. Clements and Kinman (2021) and Garland et al.'s (2013) models appeared to be the best fit, with the risk factors explaining 54.5% and 52% of the variance in job stress respectively. More specifically, the risk factors that made the most contribution to the model were job demands (Clements & Kinman, 2021) and instrumental communication (Garland et al., 2013) closely followed by supervisory support and degree of autonomy. The study that received the lowest quality assessment score produced the poorest

model (Lambert et al., 2007). Although usefulness of findings depends on many factors, some researchers have suggested that if the explained variance falls below 35%, this indicates that a study may need to be repeated with a reconsideration of measures used (Nathan et al., 2012). As such, it must be considered that this paper's methodological rigour significantly impacts on the usefulness and quality of findings and implications.

NARRATIVE DATA SYNTHESIS AND KEY FINDINGS

In the following sections, the risk factors are considered in themes using Cooper and Marshall's (1976) model of job stress, to aid the understanding of the results. The model neatly conceptualises five classifications of workplace-specific sources of stress within an organisation. This model was deemed an appropriate fit to aggregate the findings in the current literature review (See Table 3).

Table 3: Factors related to stress in selected articles

Classification	Stressor
Intrinsic to job	High workload
	High responsibilities
	High job effort
	Perceived dangerousness
	Job variety
	Low salary
	Overtime without payment
	Strain-based conflict (work problems and trauma follow staff home)
Role in organisation	Role ambiguity
	Role clarity
	Input into decision-making
Relationships at work	Low supervisory support/trust
	Low peer support/trust
	Inmate contact
	Supervision quality
	Communication
	Integration
	Interactional justice (employee respect)
Career development	Training quality
	Slow promotion

Organisational structure and climate	Formalisation
	Feedback
	Autonomy
	Distributive justice (eg. Rewards in the form of fair pay)
	Reward

Stressors intrinsic to the job

Ten studies included in this review explored the relationship between factors intrinsic to the job and stress and burnout (Akbari et al., 2017; Clements & Kinman, 2021; Hu et al., 2015; Keinan & Malach-Pines, 2007; Lambert, et al., 2020; Lambert et al., 2009b; Lambert et al., 2007; Paoline et al., 2015; Setti & Argentero 2015; Steiner & Wooldredge, 2015). The quality of the studies for this category ranged from 57.5% (Lambert et al., 2007) to 92.5% (Steiner & Wooldredge, 2015). The three key role-intrinsic factors that emerged frequently from the higher quality studies (Clements & Kinman, 2021; Hu et al., 2015; Lambert et al., 2020; Steiner & Wooldredge, 2015) included perceived dangerousness, high workload and high job effort. Both Clements and Kinman (2021) and Steiner and Wooldredge (2015) found the strongest factors associated with emotional exhaustion and job stress were perceived dangerousness and high workload. Additionally, Hu et al. (2015) and Lambert et al. (2020) both used an OLS for the statistical analysis. Hu et al. (2015) demonstrated a strong association between high job effort and emotional exhaustion, professional efficacy and cynicism. Similarly, Lambert et al. (2020) found that high workload ($p < .001$) and high levels of perceived dangerousness ($p < .05$) were significantly associated with job stress.

Other studies of lower methodological quality also established consistent findings with regards to a relationship existing between high workload and work stress (Keinan & Malach-Pines, 2007), and perceived dangerous and burnout (Lambert et al., 2009b; Paoline et al., 2015). Only two studies found conflicting results with regards to the relationships outlined. Lambert et al. (2009b) was the only study that found a non-significant relationship between perceived dangerousness and levels of burnout. In addition to this, Setti and Argentero (2015) found no statistically significant relationship between high workload, heavy responsibilities and emotional exhaustion or depersonalisation. However, the method of analysis may explain why this result was not statistically significant, as the separate components that make up organisational stress in this study were not examined individually.

Other role-intrinsic factors were highlighted by studies of a marginally lower quality. Keinan and Malach-Pines (2007) and Paoline et al. (2015) found that overtime without payment and a low salary were the most stress-inducing factors and significantly correlated with physical and emotional symptoms related to stress and burnout. Furthermore, no direct relationship was found between job variety and stress (Lambert et al., 2007); however, this paper received the lowest quality assessment score of all the studies, with concerns relating to the method by which participants were recruited, the absence of a power analysis to justify the sample size and no known measures were taken to address non-responders. As such, it cannot be concluded with confidence that a relationship exists between job variety and workplace stress.

Role in organisation

Seven studies examined participant's role in the organisation and the association with workplace stress (Akbari et al., 2017; Garland et al., 2013; Lambert et al., 2009a; Lambert et

al., 2009b; Paoline et al., 2015; Steiner & Wooldredge, 2015). The overall quality of the studies ranged from 62.5% (Lambert et al., 2009b) and 92.5% (Steiner and Wooldredge, 2015). All the studies found a relationship between factors associated with their role in the organisation and stress and burnout; however, some of these did not contribute to the regression model. For example, Garland et al. (2013) found that as input into decision-making increased, job stress decreased; however, this factor did not significantly contribute to the variance explained in the model. In contrast, Lambert et al. 2020 and Paoline et al. (2015) both examined the relationship using an OLS regression analysis and found that input into decision-making was associated with job stress. The conflicting results could be explained by the lack of measures taken to address and categorise non-responders in Garland et al.'s (2013) study. As a result, this research is likely to be subject to sampling bias and is at significant risk of omitting staff who may choose not to participate in the research because their sense of agency and decision-making within the organisation is already low. Lambert et al. (2020) and Paoline et al. (2015) both made efforts to address non-responders, which may explain their significant results and gives merit to supporting their findings.

Steiner and Wooldredge (2015) and Lambert et al. (2009b) both found that role ambiguity was a strongly associated with work-related stress and burnout. A similar result was found in Paoline et al.'s (2015) study; however, the relationship between role ambiguity and work stress was only significant in women. There was only one study that found a non-significant relationship between role clarity and work stress (Lambert et al., 2020). On further exploration, this study only used two items to measure role clarity, and when measured for internal consistency, the Cronbach Alpha was 0.76 which falls within the 'acceptable' range. The researchers highlighted this as a limitation, and recommended that future research consider using more than two items to measure role clarity. In doing so, this would increase

the likelihood of a higher level of internal consistency, and ensure that this was not having an adverse effect on the results.

Career progression

Very few studies have examined the role of career stagnation in contributing to stress and burnout. In the current review, 2 studies explored the relationship between career progression and burnout. Kienan and Malach-Pines (2007) reported a significant association between slow promotion and burnout; however, there are restrictions to the conclusions that can be drawn from this research. In this study, only one item was used to measure 'slow promotion' within a specifically devised questionnaire (Pett et al., 2003). The questionnaire was then factor analysed, with 'slow promotion' generating an eigenvalue of .41 which is below the recommended .70 to ensure sufficient variance. The second study examining career progression was Lambert et al. (2020), who found that as training quality increased, job stress decreased. Further exploration of this relationship concluded that subjective views on training quality was not significantly associated with role stress. Similar to the Keinan and Malach-Pines (2007) study, training views was measured using a single item of "My organization offers meaningful, practical training." Consequently, promotion and training quality cannot be concluded as central factors to the development of stress.

Relationships

Nine of the studies explored the role of relationships at work to assess the extent to which this factor contributes to the development of stress and burnout (Garland et al., 2013; Lambert et al., 2007; Lambert et al., 2009a; Lambert et al., 2016; Lambert et al., 2020; Lambert et al., 2021; Paoline et al., 2015; Setti & Argentero, 2015; Steiner & Wooldredge, 2015). From an initial glance, the quality of supervision appeared to elicit inconsistent

63

findings, with an early paper concluding that poor quality supervision did not have a significant impact on prison personnel job stress when other environmental factors were controlled for (Lambert et al., 2007). However, more recent higher quality research has disputed this, with one paper reporting a negative correlation between role stress and supervision (Garland et al., 2013); a relationship which was also supported by Lambert et al. (2020), Lambert et al. (2009a), Lambert et al. (2016) who found that increased perceptions of team integration, as well as high levels of trust of their supervisors, had a significant impact on job stress. Specifically, individuals who experienced a trusting relationship and more intensive support from their supervisor, reported the lowest levels of burnout.

Lambert et al. (2016) and Paoline et al. (2015) both examined the role of co-worker support on stress and burnout. The first study found that as co-worker support increased, job stress decreased; however, co-worker support was non-significant in the regression model. Similarly, Paoline et al.'s (2015) results demonstrated that the more negative the relationship between co-workers, the higher the stress levels. Poor co-worker relations were also strongly associated with job stress; however, this was only significant for women. These inconsistent findings could indicate that gender plays a mediating role in the relationship between co-worker support and occupational stress, and the statistically non-significant finding from Lambert et al.'s (2016) study may be because their sample were predominantly men (59%). Nevertheless, this is a tentative hypothesis, and firm conclusions regarding the mediating nature of gender cannot be deduced.

Four studies found a significant negative association between communication and job stress (Garland et al., 2013; Lambert et al., 2009a; Lambert et al., 2020; Paoline et al., 2015;); however, communication was only a significant related to job stress in one of these studies

(Garland et al., 2013). Given Garland et al's (2013) study was one of the lowest scorers on the quality assessment tool, there is not enough evidence to suggest that communication has a strong association with stress.

Only one study examined the quality of the relationship between inmates and participants and its contribution to the development of burnout. Setti and Argentero (2015) used the MBI to explore the relationship between burnout dimensions and environmental factors and found that the stressful inmate contact demonstrated the strongest association to emotional exhaustion and depersonalisation.

Organisational structure and climate

Five studies examining factors related to organisation structure and climate (Akbari et al., 2017; Clements & Kinman, 2021; Lambert et al., 2009; Garland et al., 2013; Hu et al., 2015) however, they all examined a different factor. Despite this, 3 of the 4 studies scored 82.5% of above on the quality assessment tool, with Garland et al., (2013) being the exception. Formalisation refers to role guidance, relating to tasks that need to be completed and articulating how they should be done. Formalisation facilitates the effective implementation procedures and policies that are in line with the organisation's goals and objectives. The findings of Lambert et al. (2009a) supported the negative relationship between formalisation and job stress, in addition to determining that job performance feedback did not significantly correlate to job stress in their sample. Clements and Kinman (2021) examined the role of distributive justice on burnout. Distributive justice refers to the fairness of rewards, for example, each employee receiving a fair pay in comparison to colleagues. The regression analysis found that as distributive justice decreased, emotional exhaustion increased; however, this factor was only analysed as a mediator for the

relationship between job demands and emotional exhaustion.

Garland et al. 2013 and Hu et al. (2015) both examined only one factor from the organisation structure and climate category. Garland et al., (2013) examined the relationship between autonomy and occupational stress and found that autonomy was significantly associated with job stress, whereby as autonomy decreased, role stress increased. Hu et al, (2015) examined the effect of reward on emotional exhaustion, cynicism and professional efficacy on a large sample of 2185 prison officers. The OLS regression analysis found a strong negative effect of high reward on all burnout dimensions.

Finally, Akbari et al. (2017) used the Job Demands and Control (JDC) Model (Karasek, 1979) to combine job-intrinsic factors and organisational structure and climate factors, to investigate the role of job demands and decision latitude and the relationship with stress. Job demands incorporates the job-intrinsic factors as follows; volume of workload, responsibilities, control and input into decision-making. A significant negative relationship between the JDC model and job stress was found, supporting the notion that those undertaking passive roles in a high stress environment are more likely to experience higher stress levels.

Individual characteristics

Results examining the relationship between individual characteristics and job stress were inconsistent. Five of the studies found a significant positive correlation between length of service and overall level of stress, whereby the longer the prison employee remained in the job, the more stress they experienced (Kienan & Malach-Pines 2007; Lambert et al., 2007; Lambert et al., 2009; & Lambert et al., 2016; Oliveira et al., 2015). Hu et al. (2015) used a

chi-square analysis to identify that a relationship existed between burnout and age, with prison officers over the age of 40 significantly more emotional exhausted compared to prison officer falling below 40. Two other studies added to this finding, recognising a significant positive relationship between these two variables (Keinan & Malach-Pines, 2007; Setti & Argentero, 2015). However, two studies directly contradict these findings, showing a negative correlation between these two factors (Garland et al., 2013; Lambert et al., 2016). The majority of the studies outlined scored between 60% and 70% on the quality assessment tool, with the exception of Hu et al.ʼs (2015) study which was one of the best quality papers assessed for the review (90%). As such, there is sufficient evidence to give weight to the research papers evidencing a significant positive relationship, suggesting that older prison personnel are more likely to experience higher levels of stress and burnout.

Whilst some studies have evidenced a relationship between these individual characteristics and job stress, Lambert et al.ʼs (2016) study found no significant correlation between gender, position and job stress. It should be noted, however, that these findings may have been influenced by a small sample size. When controlling for other factors, personal characteristics were also not found to be significantly related to stress (Lambert et al., 2020). Specifically, one study reported that only 10% of the overall variance was accounted for by individual characteristics, suggesting other risk factors better explain the variance (Garland et al., 2013). This would support the contention that environmental factors are more influential than individual characteristics in accounting for job stress and burnout.

Paoline et al.ʼs (2015) study focused their research on examining the effects of gender on stress and burnout. They found that the most highly associators of job stress were the same for both male and female officers (perceived dangerousness); however, the effect was shown

to be greater in female officers. In contrast, they found that as the quality of co-worker relations increased, job stress decreased; however, this effect was greater for men. Other studies undertaking exploratory analysis of the impact of gender on stress and burnout reported inconsistent results. One study found that overall stress levels were higher in men than women (Keinan & Malach-Pines, 2007); however, other studies showed that females experienced greater levels of stress and emotional exhaustion than their male counterparts (Lambert et al., 2007; Paoline et al., 2015; Oliveira et al., 2015). Discrepancies in the results presented could be due to a number of factors; including the variation of measures used to assess stress and burnout, or the significant differences in the gender frequencies of individuals participating in the study, with the number of male participants significantly outweighing the number of female participants in the vast majority of papers.

Harizanova et al. (2018) focused their analysis on whether personality characteristics constituted a burnout-prone prison officer. Results indicated a significant correlation between personality and burnout subscales, with the strongest being a positive correlation between neuroticism and emotional exhaustion. The analysis also uncovered a moderate positive relationship between extraversion and personal accomplishment, and a strong correlation between low extraversion and high emotional exhaustion and depersonalisation. Psychoticism was also positively correlated with depersonalisation. Results from the multiple regression revealed that emotional exhaustion was most strongly associated with neuroticism, and depersonalisation was most strongly associated with low extraversion, high neuroticism and psychoticism. None of the included personality traits were significantly associated with personal accomplishment.

Prison role

Nine studies used both prison officers and prison employees from other disciplines in their sample, to support the exploration of variations in experience of role stress and burnout in different professions. The results were mostly consistent, with 6 of the 9 papers finding that prison officers experience significantly higher levels of occupational stress and burnout when compared to other prison employees (Akbari et al., 2017; Garland et al., 2013; Keinan & Malach Pines, 2007; Lambert et al., 2020; Paoline et al., 2015; Oliveira et al., 2015). This relationship has been explained by meticulously scheduled shifts, policies and procedures which limits a prison officer's autonomy and thus, controlling the extent to which stress is experienced (Paoline et al., 2015). Dissecting this further, results have shown that both security officers and prison officers were at the highest risk of stress and burnout, because these individuals experience the highest level of job demands, job stress and emotional exhaustion compared to other prison personnel (Akbari et al., 2017). This supports the idea that prison personnel working in passive roles with low job control and high job demands are likely to be impacted more severely by job strain (Keinan & Malach Pines, 2007).

The two studies that reported no significant correlation between role and job stress were of the lowest quality when compared to the other 7 studies (Lambert et al., 2009a; Lambert et al., 2016). The final study conducted by Lambert et al. (2009a) found that non-custodial staff were more likely than custodial staff to report role stress. However, it should be noted that this finding does not reflect a difference in the level of occupation stress experienced between roles, but instead the frequency and difference in self-reporting stress and burnout.

The general consensus amongst studies comparing job role has been that the impact of each environmental stressor is dependent on the nature of the work undertaken. For example,

Keinan and Malach-Pines (2007) found a significant difference in stress levels for risk factors amongst treatment and security team, with security teams more stressed by the prospect of harm, lack of interest by superiors regarding personal needs and a negative public image. Treatment teams were significantly more stressed by attempts at balancing work and family needs. This is likely to be due to the differing role characteristics, where prison officers are more overworked and are more frequently exposed to violence, intimidation and manipulative behaviour. They also discovered that lower ranking officers were significantly more stressed than commanding officers (p <.01). This may be because lower ranking officers are more likely to be in continuous contact with prisoners, therefore more frequently exposed to violence and may perceive themselves to have less control over their environment.

DISCUSSION

The current review aimed to provide an updated analysis of the literature exploring the individual and environmental risk factors leading to job stress and burnout in prison personnel. The prison environment can be a highly unpredictable and stressful place to work; consequently, leading to high turnover rates, high levels of staff absence and low levels of job satisfaction (Dowler et al., 2005; Lambert et al., 2016). As such, it is especially important that the individual and organisational factors contributing to stress and burnout in this population are identified for a couple of reasons. Firstly, the findings can contribute to increasing institutional safety, supporting the development of appropriate interventions, as well as revisions of policies and procedures. Finally, identifying areas where a workplace culture shift may be needed could function as a circuit breaker for stress and burnout. 17 studies met the inclusion criteria and were rigorously analysed to extract key findings and to explore themes across the articles.

Stressors intrinsic to the job incorporated practical elements of the role (eg. High

workload, low salary, poor job variety) as well as daily challenges likely faced by staff

working within a prison environment (fear of victimisation and perceived dangerousness).

Previous research has shown that these risk factors increase an employee's sense of

overwhelm, feelings of underappreciation, and can lead them to question their role, purpose

and value within an organisation (Armstrong et al., 2015). Therefore, the majority of research

has focused more on these organisational factors and explored their links to burnout.

Stressors intrinsic to the job demonstrated somewhat stable findings. Factors related

to high job effort, high workload, and higher levels of perceived dangerousness were found to

be the most consistent stress-inducing factors, and were significantly associated with physical

and emotional symptoms related to stress and burnout (Kienan & Malach-Pines 2007;

Lambert et al., 2009; Lambert et al., 2020; Steiner & Wooldredge, 2015). It is possible that

high workload and high job effort are inextricably linked: if prison employees feel that they

have too many tasks and not enough time, they are unlikely to reap the benefits of high job

effort if the task list is consistently replenished. As such, with high turnover levels

perpetuating the vicious cycle of understaffing and overworking, prison employees are

unlikely to experience the physical and psychological relief of workload reduction (Matz et

al., 2013).

A non-significant association between role dangerousness and burnout was found by

Lambert et al. (2009), which was not consistent with the results of three other papers

(Lambert et al., 2020; Paoline et al., 2015; Steiner & Wooldredge, 2015). Although this paper

is of marginally lower methodological quality, there may be other plausible explanations for

this inconsistency. Firstly, this discrepancy may be explained by prison officers' expectations

about their role, and a sense of acceptance about the possibility of violence when they signed

up for the job. Additionally, the feeling of danger may give some employees a sense of duty and excitement rather than acting as a stressor (Carter, 2018). Whilst a dangerous environment might cause a prison employee to be more aware of their surroundings, it does not necessarily mean that it is a source of stress for every officer (Symkovych, 2018). Working directly with prisoners did not appear to be a salient cause of burnout; however, it could be that it is important to break this factor down into the nature of the contact. If the majority of contact is controlled and well-managed, then this is unlikely to be a strain compared to frequent chaotic and confrontational interactions.

Perceived dangerousness was not extensively discussed or highlighted as a contributing factor to stress and burnout in the last review (Finney et al., 2013). However, since Finney et al.'s (2013) paper, the total number of assaults, including assaults to staff has increased exponentially (Ministry of Justice 2013; Ministry of Justice 2022). Even if prison employees are not the target of a physical attack, the frequency of observations of violent incidents involving other officers or prisoners, or their exposure to threats, are evidently contributing to stress and burnout (Cullen et al., 1985; Lombardo, 1989; Schaufeli & Peeters, 2000).

An individual's understanding of their role in the prison organisation, as well as their freedom to play an active role in decision-making, has demonstrated consistently to be a significant contributor to the development of stress and burnout (Cooper & Marshall, 1976). It can be difficult to complete tasks efficiently and effectively if there is a lack of clarity on the role and expectations, which can lead to apprehension, frustration, resentment and feared punishment for poorly completed tasks. Results showed that role clarity, role ambiguity and input into decision-making all had a strong association with stress and burnout (Lambert et

al., 2009; Steiner & Wooldredge, 2015; Paoline et al., 2015).

Providing employees with the opportunity to input into decision-making has long been shown to increase job satisfaction and decrease work stress in a wide range of professions (Jackson, 1983). In an erratic and unpredictable environment such as prison, giving staff a voice communicates that their opinion is important and trusted, increasing their sense of value and psychological attachment within an organisation (Slate & Vogel, 1987). Furthermore, numerous other studies have demonstrated that employees who contribute to organisational decisions report less anxiety and job stress in comparison to their counterparts (Bhui et al., 2016; Ullah et al., 2016). Whilst this would indicate that playing an active part in decision-making may act as a buffer to job strain for individuals managing a heavy workload, one study in the current review found the contrary. These findings align with the Job-Demand -Control Model outlined, which suggests that prison personnel who are exposed to ambiguous and frequently conflicting demands are more likely to experience associated stress (Steiner & Wooldredge, 2015). The current review provides further evidence for the theory underpinning occupational stress, as well as supporting the long-established findings of a relationship between perceived role and work stress (Cullen et al., 1985; Philliber, 1987; Schaufeli & Peeters, 2000).

The review provides strong evidence that the quality of relationships in the prison environment have a significant impact on whether an individual experiences high levels of job stress and burnout, with the most consistent strongest associations with stress and burnout being poor supervisory support, poor supervision quality and poor communication (Lambert et al., 2020; Lambert et al,.2009a), Lambert et al., 2016; Setti & Argentero, 2017). The results indicate that prison services should ensure that prison personnel receive adequate

supervision where they feel encouraged and supported, to ensure that job stress and burnout is managed effectively. Ensuring supervisors are 'people-orientated'' and facilitate an empowering relationship with their subordinates is likely to increase and improve communication.

The 'people-oriented' leadership style is characterised by the nurturance of interpersonal relationships, as a way to engender a more productive, safe and positive work climate; enabling integration between teams encourages group cohesion, and the development of effective and trusting multidisciplinary relationships. The people-oriented approach is the antithesis to the 'stereotypical masculine leadership style', which is task-oriented and focused on structure, performance and meeting organisational goals (Van Engen et al., 2001). Given the male-dominated nature of the prison officer workforce, the approach to leadership is likely to be most frequently task-oriented (Cieslak et al., 2008). It is recommended that HMPPS review current training opportunities, to ensure that supervising officers and custodial managers (as well as those transitioning into the role), are offered coaching to develop skills in adopting a 'people-oriented' leadership approach. This will not only up-skill those in managerial roles, but also communicates to staff that they are worth investing in. Making this shift would ensure that other job-intrinsic risks factors such as role ambiguity and high workload were addressed before they became detrimental antecedents of stress and burnout.

Findings regarding the importance of co-worker support were more equivocal, with one study showing that this factor was only a prominent feature of the burnout experience for women (Paoline et al., 2015). Furthermore, although Lambert et al. (2016) found a negative correlation between job stress and co-worker support, this factor did not significantly

contribute towards the regression model. One explanation for why the quality of the relationship between employees and supervisors is a more prominent contributing factor may be because staff in the vertical chain can be a significant source of job demands, as well as an invaluable resource for coping with occupational stressors; therefore, the lateral support from co-workers may be perceived as less impactful (Bakker & de Vries, 2021).

It should also be noted that both Paoline et al., (2015) and Lambert et al. (2016) used Crank's (1995) Job Stress Scale to assess level of co-worker support; however, the tool measures support more generally, with the quality of co-worker relationships captured in only 3 questions. Consequently, both studies scored 75% or below on the quality assessment tool, highlighting methodological problems with regards to the instrument used and the representative nature of the sample population. Consequently, further research should be conducted to explore the role of co-worker support in buffering the impact of stress and burnout, using a more precise scale such as the Co-worker Discretionary Support (CDS) scale (Collins, 2014), which would likely provide more reliable and conclusive results.

Trusting those you work with and having positive work relationships is essential, especially in the prison environment which poses complex and risky challenges (Haynes et al., 2020). Effective communication was also found to have a significant negative association with job stress (Garland et al., 2013; Lambert et al., 2009a; Lambert et al., 2020; Paoline et al., 2015); however, only one of these studies demonstrated a significant association between lack of communication and job stress (Garland et al., 2013). However, Garland et al's (2013) study scored the lowest quality assessment score out of the four studies exploring this factor (Lambert et al., 2009a; Lambert et al., 2020; Paoline et al., 2015), with significant methodological issues centring around sampling. In particular, there are concerns about

possible non-response bias, given those on sick leave were not contacted to participate in the study. Therefore, it is possible that this research does not accurately capture the extent to which poor communication plays a role in the burnout experience, as a significant proportion of the population of interest (those on sick leave for occupational stress and burnout) would have been missed through the sampling strategy.

Although it is not possible to make firm conclusions regarding this factor in the current review, this does not mean that quality of communication does not contribute to the occupational stress trajectory, and there may be other factors that mediate the relationship between communication and job stress. For example, lack of effective communication may decrease a sense of safety and in turn, increase job stress. Further research of higher methodological rigor is required to allow for the exploration of this relationship with more certainty.

Lambert et al. (2007) was the only paper that found no significant relationship between quality of supervision and burnout; however, this is unsurprising given the methodological limitations of this article. In particular, the tool used to measure supervision quality was the Prison Social Climate Survey (Wright & Saylor, 1992), which is a 42-item self-report questionnaire measuring 8 dimensions related to the prison environment. Only three of these items are related to supervision quality and so were used in the study. The Prison Social Climate Survey was 15 years old when it was used by Lambert et al. (2007), and given the prison policies and procedures most probably experienced significant shifts and revisions, this measure is likely to have been outdated and may have no longer accurately captured the 'quality of supervision' dimension it once did.

Dissecting the Prison Social Climate Survey and examining the items further supports this argument. One of the items in the measure is: "My supervisor asks my opinion when a work-related issue arises". Whilst this statement is meant to reflect a high quality of supervision, it could have the opposite effect and decrease the supervisee's sense of trust and containment, especially when working in a highly volatile prison environment (Arnold et al., 2012). Research has supported this hypothesis, finding that prison personnel value clearly defined roles, direction, expectations and guidance within their jobs and do not want to be overloaded in their assigned tasks (Lambert et al., 2009). As such, confirmation that these items remain relevant to current supervisory processes would be necessary. Use of an updated measure that more accurately reflected the essence of good quality supervision, as well as adopting a more methodologically rigorous research strategy, may have yielded more concurrent results.

Only two studies explored the relationship between career progression and job stress and burnout (Kienan & Malach-Pines, 2007; Lambert et al., 2020), with both papers examining very different factors under the umbrella of career progression (Kienan & Malach-Pines, 2007; Lambert et al., 2020). Additionally, both papers developed their own tool to measure the relevant factor. Whilst they undertook some appropriate analyses to assess the utility of the questionnaire prior to use, it is evident that this process was nowhere near as extensive in comparison to other validated measures. Consequently, it cannot be assumed that the devised questionnaires measure what they claim to measure.

The lack of research examining this variable has exposed a significant gap in the literature, and further research is required to understand this relationship fully. As such, it cannot be concluded that career progression plays a role in the development of occupational

stress and burnout. The inconsistent results related to risk factors such as training views may, in fact, indicate that the effect of job resource variables may be contextual and vary between the type and location of the prison institution. Furthermore, an insignificant direct effect does not imply that they are irrelevant workplace variables to consider, given that studies reported significant relationships between risk factors (Lambert et al., 2020). Therefore, it is quite plausible to theorise that they play an indirect, mediating, role in explaining their relationship to job stress and burnout. Finally, there was limited research examining the role of organisation structure and climate factors on the development of stress and burnout. Of the papers available, significant risk factors were formalisation, distributive justice, autonomy and reward (Akbari et al., 2017; Garland et al., 2013; Lambert et al., 2009; Lambert et al., 2020; Paoline et al., 2015)

Results for individual characteristics were inconsistent across some demographic variables, and more consistent for others. The findings supported a significant positive relationship between length in service, age and burnout (Kienan & Malach-Pines 2007; Lambert et al., 2007; Lambert et al., 2009; & Lambert et al., 2016; Oliveira et al., 2015). This suggests that the longer prison personnel remain in the role, the more affected they are likely to be from job stress, and at a higher intensity. On a macro level, this indicates that prison staff who remain in the role for an extended period of time are likely not accessing effective interventions that could act as a buffer to stress and burnout. It has been hypothesised that this may be due to lack of awareness of the wellbeing support services available (Kinman et al., 2016), an absence of trust, and stigma related to mental health issues perpetuated by an entrenched hypermasculine culture (Wills et al., 2021). Research exploring this further is needed, to establish the extent to which these factors may acts as barriers to receiving support to reduce symptoms of stress and burnout.

Again, results regarding the relationship between gender and occupational stress and burnout were inconsistent; however, the majority of studies suggested that women experienced greater levels of occupation stress and emotional exhaustion in comparison to males (Lambert et al., 2007; Oliveira et al., 2015; Paoline et al., 2015). The discrepancies in gender differences may well be dependent on the prison facility, and the culture and climate that is fostered. For example, an explanation for higher stress levels in females could be increased hostility regarding their fit for the work environment, and increased sexual harassment from prisoners and male colleagues (Carlson et al., 2003; Savicki et al., 2003).

To conclude, there are an extensive array of risk factors that are associated with the development of stress and burnout in prison personnel. Factors that demonstrated an association with stress and burnout across the research studies include:

Organisational

- high job effort

- high workload

- increased perception of dangerousness

- low input into decision-making

- limited role clarity / high role ambiguity

- low supervisory support and supervision quality

- limited formalisation

- low levels of autonomy

- low reward

Individual factors

- Age

- Length in service

Future research should continue to explore the factors that contribute to or cause stress and burnout, focusing on specific areas of neglect, such as career progression and organisational structure and climate.

IMPLICATIONS

The current review has highlighted organisational factors and individual factors that are linked to burnout; as well as spotlighting numerous areas for further research. This would increase our depth of understanding of the prison employee population. Reducing prison personnel stress and burnout should be of primary importance to forensic institutions, as the benefits of a mentally healthy workforce would extend beyond the prison walls. Reducing stress and burnout by addressing the risk factors highlighted in this review is likely to increase staff retention, job satisfaction, and boost efficiency and morale (Finney et al., 2015); and is expected to have a ripple effect on the wellbeing of prisoners, as well as the families of prison staff.

The results indicate that the primary focus for interventions should be at an organisational level, to review and address issues relating to workload, role clarity, peer support, supervision quality and staff's perceived sense of value within the establishment. Whilst individual level interventions such as wellbeing support services are just as important, staff are not going to experience longer-term reductions in stress and burnout if these macro-level aspects are not addressed. Bearing in mind the uncertainties, stress, and potential role

shifts occurring as a result of the recent COVID-19 pandemic, it is recommended that a full review of employee support services is undertaken, to assess the efficacy and quality of current interventions in place, and to allow for more bespoke interventions to be developed and implemented, as necessary.

Although the implementation of new, innovative interventions in prisons may have the potential to improve the wellbeing of this population, it is crucial to recognise that the success of these may be influenced by individual characteristics, such as prison officers' level of resilience (Kemshall & Wood, 2019), hypermasculinity (Wills et al., 2021) and approaches towards help-seeking (Lambert et al., 2017). To expand on this, hypermasculine attitudes have the potential to be particularly problematic in the context of interventions aimed at promoting the wellbeing of prison officers, as they may lead to a reluctance to seek help or participate in interventions that are perceived as weak or ineffective (Harty & Vermillion, 2018). Moreover, hypermasculine attitudes can contribute to a culture of silence around mental health issues, where prison officers may feel stigmatised for seeking help or discussing their mental health difficulties with others (Michie, 2019), risking the exacerbation of distress and preventing early intervention, leading to potentially further negative outcomes. As a way to maximise the benefits of wellbeing interventions, it is necessary that research explores prison officers' willingness to engage, whilst also spotlighting potential barriers (Cox et al., 2020). By taking into account individual characteristics, interventions can be tailored to maximise their effectiveness and ensure positive outcomes for both prisoners and prison officers.

STRENGTHS AND LIMITATIONS

The current systematic review was rigorously systematic in its approach, providing an updated synthesis of the data examining the extent of individual and environmental factors on

stress and burnout. However, there are a number of limitations to be addressed. Firstly, all the studies included in the review adopted a cross-sectional design, meaning that the factors outlined cannot be assumed to have a causal relationship with occupational stress. This limitation is further exacerbated by the vast majority of studies using a correlation and regression analysis, neither of which provide scope to imply causality. Further research should consider conducting longitudinal studies in this area, to enable researchers to have a more concrete understanding of the causal factors.

Another limitation of this review is that all the papers incorporated were required to be written in English. This meant that the majority of the studies used samples from Western countries. It is important to note that the immeasurable differences in the way prison systems operate across the world, limits the generalisability of the current findings. Furthermore, the quality of the studies varied significantly, with only a few papers evidencing a consistent, methodologically rigorous approach. There are certainly concerns related to the sampling methods and sample size, as well as limited attempts by authors to address sample representation, and non-responders. This is noteworthy considering the fact that this excluded prison employees who were on sick leave, and were possibly the most significantly impacted by stress and burnout. It is critical that future research conducted in this area aims to be more methodologically transparent regarding the research process, as it risks impacting on the quality and validity of the findings.

CHAPTER 3: EMPIRICAL RESEARCH STUDY

Perceptions of wellbeing support services in prison officers and the role of

hypermasculinity as a barrier to help-seeking

ABSTRACT

A key component of the prison officer role is to manage serious incidents, such as violence, hostage taking, self-injury and attempted suicides. Witnessing traumatic incidents can have serious physical, emotional and psychological effects, leading to mental health difficulties including Post Traumatic Stress Disorder (PTSD), depression and anxiety (Boudoukha et al., 2013), with statistics showing that these are the most common sickness-related absence among prison officers (Ministry of Justice, 2019). Research has shown that male-dominated professions risk the perpetuation of normative beliefs surrounding 'toughness' and 'emotional inexpression' (Pleck et al., 1993). Consequently, the fear of being 'de-masculinised', perceived as vulnerable or viewed as emotionally weak can actively discourage them from seeking wellbeing support (Cleary, 2005). Until late 2021, the limited research in this area had speculated on prison officers' resistance to help-seeking, and its relationship with hypermasculine attitudes had only been researched within the prisoner population (Kupers, 2005; Wills et al., 2021). Therefore, the current empirical research study aimed to examining the prison social climate, developing a fuller understanding of prison officers' perceptions and experiences of help-seeking, and to explore whether hypermasculinity may act as a barrier to those who need wellbeing support but are not accessing it. 431 participants completed the Hospital Anxiety and Depression scale (HADs; Snaith & Zigmond, 1984) the Hypermasculinity Inventory (Mosher & Sirkin, 1984), the EssenCES-Prison Version measuring social climate (Schalast et al., 2008) and a specifically designed help-seeking questionnaire. Confirmatory data analysis approach was adopted to test the hypothesis that prison officers who are clinically anxious and/or depressed will be significantly higher for hypermasculinity for those who have never accessed support. Furthermore, it was hypothesised that there will be a significant association between hypermasculinity score and whether officers access support services or not. Exploratory

analysis was also conducted to examine the relationships between variables. Results showed that the vast majority of the prison officer sample fell within the clinical range for anxiety and/or depression. A t-test was conducted to examine the relationship between hypermasculinity and help-seeking in clinically anxious/depressed prison officers, with results showing that hypermasculinity scores were significantly higher for individuals not accessing support services compared to those who were. Finally, hypermasculinity was the only factor that contributed to the regression model, with those with higher levels of hypermasculinity less likely to access wellbeing support service. A discussion of the findings alongside limitations are presented.

INTRODUCTION

Managing critical incidents as a prison officer

Prison officers are frequently exposed to varied types of serious incidents that may include violence, injury, and death. Not only do prison officers fall victim to direct assault, they are also mandated to intervene in high risk incidents between prisoners, which puts them in further danger (Liebling et al., 2010). Recent statistics have shown that there were 7979 prisoner-to-staff assaults and 13,784 prisoner-to-prisoner assaults in England and Wales between December 2020 and March 2021, with 2328 of these being serious assault incidents (Ministry of Justice, 2021). Since 2010, incidences of violence have been on a steady upward trajectory, although a recent fluctuation has been highlighted since the COVID-19 pandemic. The slight reduction in incidents recorded since 2020 could be explained by a number of factors, including the reduced activity and restricted prison regimes enforced to safely manage the risk of infection during the Covid-19 pandemic, limiting prisoner contact and the number of witnessed incidences of violence. As such, whilst one explanation for this reported reduction is that the restrictive contact with staff and other prisoners buffered interpersonal stressors and inhibited the escalation of conflict and physical assault, it is also a possibility that assaults continued to rise within the confines of the regime, but that these were not as readily observed. Either way, it is likely that following a return to standard regime, these figures may continue to climb.

As well as having violence towards others to contend with, prison officers also witness and manage incidences of self-harm and suicide. Both violence and self-harm in the prison population had already reached record highs before the pandemic began, with Covid-19 exacerbating several existing problems (House of Commons, 2020). From December 2020 to March 2021, the Ministry of Justice reported 12,969 self-harm incidents and 79 suicides

within a 12-month period (Ministry of Justice, 2021). Prison officers are most often the only staff available, therefore they stand as the front-line of defence in managing self-injury and preventing suicides (World Health Organisation, 2007). This heavy responsibility is enduring, with one study finding that officers frequently re-live the incident and associated distress (Borrill et al., 2006).

Trauma in Prison officers

The American Psychological Association has defined trauma as the emotional and bodily response to a distressing or disturbing event or sequence of events, which psychologically overwhelms; often hindering an individual's ability to cope and challenging an individual's perception of safety (Evers et al., 2020). Initial reactions to a stressful or traumatic event can affect the individual physically, psychologically and emotionally, which, without appropriate coping mechanisms in place, can lead to long-term negative consequences and traumatic stress-related disorders (U.S. Department of Health and Human Services, 2014). Individuals working in high-stress and unpredictable environments such as prison are at an elevated risk for direct experiences of trauma, as a result of threats, injuries, and the continuous management of challenging behaviour (Thomas Jr, 2012).

More specifically, prison officers are often directly exposed to traumatic events, including threat of or actual physical assault, riots, arson, hostage taking, assault with bodily fluids, intercepting a suicide, finding a dead or mutilated body and other unique traumatic experiences (Spinaris et al, 2012). A large-scale prevalence study in the USA showed that with regards to exposure to critical incidents, 100% (3599 participants) reported to have experienced at least one violent incident involving injury or death during their work as a prison officer, with an average of 28 critical incidents experienced throughout their career

(Spinaris et al., 2012; Spinari et al., 2013). Consequently, the prison environment presents a uniquely unsafe workplace compared to most other occupations; resulting in a considerably higher risk of experiencing burnout, mental health difficulties including Post Traumatic Stress Disorder (PTSD), depression and anxiety, higher levels of staff turnover, and early retirement from the role (Boudoukha et al., 2013; Steiner & Wooldredge, 2015). Burnout has been coined the 'professional's kryptonite' (Wade, 2018), and is the consequence of prolonged occupational stress, impacting on an individual's psychological and physical wellbeing, quality of life and fitness to work (Schouteten, 2016).

Vicarious Trauma

Another form of trauma that prison officers are exposed to is vicarious trauma (McCann & Pearlman, 1990). Vicarious trauma refers to the experience in which professionals take on the same emotional experiences and psychological distress as the individual they are working with, indirectly becoming victims themselves (Figley, 1996). The symptoms of vicarious trauma mirror those experienced by direct victims and may include intrusive thoughts and images associated with the critical event (even when it has not been directly experienced), avoidance of specific individuals, locations and settings, nightmares and hypervigilance (Munger et al., 2015; Tabor, 2011).

Prison officers are not just at risk of experiencing vicarious trauma through their interactions with prisoners, but also: when reading criminal records or incident reports (which may include graphic descriptions); hearing about or viewing photographic or videographic material of injuries sustained by assaulted colleagues or prisoners; during the process of documenting injuries or deaths involving colleagues or prisoners; and when participating in debriefings or incident reviews following critical incidents (Spinaris et al., 2013). The impact

of these types of experiences can be often overlooked, which can make recognising a trauma response and associated psychological problems more difficult to identify.

Research exploring the experiences of vicarious trauma in prison officers is somewhat limited; however, recent qualitative research (King & Oliver, 2020) has evidenced that UK prison staff are frequently exposed to indirect trauma, witnessing or hearing about traumatising and stressful incidences on a daily basis. It is noted in the literature that a vast proportion of the prison population have experienced past trauma (Wolff & Shi, 2012) with 37% of prisoners having been identified to suffer with a mental health issue (House of Commons, 2017). Furthermore, Post Traumatic Stress Disorder (PTSD) in prisoners is significantly higher than the general population, with one meta-analysis establishing a prevalence rate as high as 38% (Baranyi et al., 2018). As such, prison officers are under considerable emotional and psychological pressure to support prisoners who describe their own traumatic experiences that occurred prior to or during their imprisonment, or in managing trauma-based behaviours (Spinaris, et al., 2013).

In summary, the challenges faced by the prison officer population are extensive, and the potential impact of repeated exposure to trauma is significant (Maslach et al., 1986). As the strain on prisons increases exponentially (Ministry of Justice, 2019a), the system and the individuals operating within it have limited choice but to adopt a reactive 'management-by-crisis' approach (Miller & Najavits, 2012). Adapting to function in a state of relentless hyper-vigilance and emotional detachment may operate as a way to survive the environment but does not enable space for employees to thrive in their place of work. Alongside this, the physical safety and security of prisoners is likely to always take precedent over the emotional and psychological experiences of prison officers, limiting the potential for the organisational

change and culture shift required to improve the wellbeing of this population (Kubiak et al., 2017). There is evidently a constellation of individual and operational barriers to addressing these concerns, and further exploration is paramount to improving models of care and a more positive social climate for prison officers.

Masculine Ideology

Masculinity has been defined as a 'socially constructed gender ideal for men and male roles' (Thompson & Pleck, 1995). Masculinity is socially and historically constructed and can be moulded by the expectations of a particular social context (Neilson et al., 2020). Traditionally, masculine ideology has presented the idea that the suppression of emotions, and the exercising of power and control are internalised as the normative masculine gender role (Seidler, 1997). Early literature exploring the theoretical underpinnings of masculine ideology have discussed the societal endorsement of these normative beliefs about being 'tough' and 'emotionally inexpressive' (Pleck et al., 1993). Therefore, roles, characteristics and emotions that are assumed to clash with the male character are often rejected or blocked out (Seidler 1997).

Hypermasculinity within the Prison Culture

As outlined in Chapter 1, hypermasculinity is characterised as an extreme form of masculine gender ideology, where males may over-emphasise and exaggerate the traditional male role (Mosher & Sirkin, 1984). Researchers have conceptualised hypermasculinity as encompassing three traits: (a) calloused attitudes toward women and the view that showing emotions is feminine (b) violence as manly and (c) seeing danger as exciting (Mosher & Sirkin, 1984).

90

Attitudes and values that reflect entrenched hegemonic masculine ideology have been observed within male-dominated institutions such as the prison service (De Viggiani, 2003). However, while hypermasculinity can lead to an individual portraying the 'ideal 'male identity within the context of the prison environment, it is not, and should not be considered a normative behaviour (Morse, 2017). The literature suggests that these values appear to be held at a systemic level, creating a pervasively hypermasculine culture; with both staff and prisoners subject to the effect of this (Crewe et al., 2014). Particularly in the western world, power and physical force are often considered a significant feature of idealised masculinity (Tan et al., 2013). Indeed, definitions of hypermasculinity tend to centre around the physical aspects of violence and danger, with emotional features often overlooked (Ben-Zeev et al., 2012).

It is posited that embodying a constellation of hypermasculine traits within the prison environment may have a number of functions: the first is the 'emotional mask 'role it plays in hiding vulnerabilities in acutely stressful or emotional situations (Crewe et al., 2014). In this case, it functions as a coping mechanism as a way to generate a relief in response to acute stressors (Spencer et al., 2004). A second function relates to the positive reinforcement of feeling in control and powerful, in a profession that is frequently faced with uncertainty and a risk of harm. Both functions outlined could be categorised as a survival technique (Franzen, 2021); nevertheless, the extent to which these may overpower the drive to create a rehabilitative culture that is so often associated with 'soft 'emotions, 'vulnerability 'and 'weakness', is an ongoing concern (Seymour, 2003).

This unhealthy, hypermasculine, prison culture is likely to be fuelled further by systemic pressures, such as staffing shortages (Woodall & Freeman, 2021) and overcrowding (MacDonald, 2018). With these factors creating added demands and increasing the threat

level and incidences of violence (Summerlin et al., 2010), in some cases, hypermasculinity may act as an adaptive coping response to the intense and unpredictable environment (Morse, 2017). For example, the use of hypermasculinity can be beneficial to gain status within the prison setting, foster domination and control the prisoners (Seymour, 2003; Spencer et al., 2004).

Hypermasculinity within the prison culture may emerge in different ways: Individuals may be attracted to a prison career because they enjoy the thrill of working in a fast-paced, dangerous environment that satisfies their hypermasculine personality traits (Haney et al., 2011). Alternatively, hypermasculine environments may force individuals to act in hypermasculine and dominating ways as a means to exert control and to prove they are not 'weak'(Kupers, 2010). It is also quite possible that a hybrid of the two schools of thought exist; which continues to reinforce the misogyny and toxic masculinity that are central to the male prison culture. Within an occupational context, this has the potential to foster a negative social climate, where prison officers risk feeling unsupported and jeopardising their sense of physical security.

Masculinity as a Gender Expression

Due to the long-standing, outdated perspective that gender takes on a binary form, there is a limited understanding of the term 'masculine', due to its close alignment with the male sex. This often plays out in the gender literature, which makes frequent reference to 'stereotypical male and female traits'(Bailey et al., 2002); however, more recent research exploring the concept of female masculinity has considered masculinity as, 'being expressed through personality traits, behaviours, interests, mannerisms, clothing preference, and appearance' (p.1, Claire & Alderson, 2013).

At present, there appears to be no research quantitatively exploring hypermasculine traits in both male and female prison officers. Whilst hypermasculinity has long been considered a constellation of traits that are exclusively experienced by males, society is becoming more understanding that individuals can live outside of the gender binary and express nonconforming gender identities (Claire & Alderson, 2013). Gender expression is seen by many as fluid, and this can be different to an individual's biological sex or gender identity. In other words, society may identify cues for masculinity and femininity through the way an individual presents themselves (appearance, behaviour, body language, attitudes); however, it should not be assumed that this will always match their biological sex or internal experience of gender. As such, for the purpose of the current study, it is proposed that individual's expression of hypermasculinity is not restricted by gender, and that female prison officers are not immune from presenting hypermasculine traits, attitudes and values.

Masculinity, Mental Health, and Help-Seeking

Over the years, the gender and health research field has begun to pay more attention to the relationship between men's low depression diagnosis rates and high suicide rates in the general population (Kilmartin, 2005). Research has recognised a link between the 'silent suffering 'of men with mental health conditions and dominant masculine ideals present within society generally (Coen et al., 2013). It has also been highlighted how masculine stereotypes can limit men's emotional expression and exacerbate the stigma around experiencing mental health difficulties (McKenzie et al., 2018). This has shown to have clear implications for the risk of suicide in males, as the fear of being 'de-masculinised', 'vulnerable' or viewed as 'emotionally weak' actively discourages them from seeking support (Cleary, 2005).

The exploration of gender and wellbeing has led to the development of the concept of gender role conflict - a psychological state in which restrictive definitions of masculinity, have the potential to negatively impact men's mental health and wellbeing (O'neil, 2015). Research exploring this interaction in relation to help-seeking intentions and behaviours has found that men are much less likely to seek support for psychological difficulties in comparison to women (Mahalik et al., 2003), with conformity to traditional masculine norms accounting for the less favourable attitude towards help-seeking (Addis & Mahalik, 2003). Furthermore, research dissecting the help-seeking process determined that men find it significantly more challenging to acknowledge and label feelings of distress and emotional difficulties, in comparison to women (Leong & Zachar, 1999). This is thought to occur because the behaviours associated with help-seeking, including disclosing a need for support and acknowledging emotional difficulty, conflict with the masculine beliefs that men should be 'tough' and 'emotionally inexpressive' (Addis & Mahalik, 2003; South, 2017).

More in-depth studies investigating this concept have concluded that factors associated with gender role conflict, including traditional gender role attitudes, restrictive emotionality and power, predict more negative feelings towards seeking psychological support (Good & Wood, 1995; Robertson & Fitzgerald, 1992; Vogel & Heath, 2016). Research findings have highlighted the presence of a 'macho' prison culture, in which the suppression of emotions has been linked to the exacerbation of distress and subsequent development of mental illness (Crewe et al., 2018; Hua-Fu, 2005). Considering that the prison officer profession remains male dominated at 72% (Her Majesty's Prison and Probation Service, 2019), male prison officers are less likely to display help-seeking intentions (Vogel & Heath, 2016; Yousaf et al., 2015), especially when they adopt traditional

masculine gender roles, attitudes and values (Karaffa & Tochkov, 2013; McKelley & Rochlen, 2010).

It has been documented in the literature that for prison officers, admitting to needing emotional support or feeling affected by a critical incident is often considered 'weak', and risks one being perceived as 'unfit' for the job or a liability to other colleagues (Spinaris, et al., 2013). Consequently, prison officers may be more hesitant to access wellbeing services such as the Employee Assistance Program which provides counselling, support with mental health difficulties and critical incident response debriefs (Bloom & Farragher, 2013). This makes it challenging for systems to identify if sufficient resources are being delivered to support prison officers, and risks minimising the impact of direct and vicarious trauma.

Previous research in this area

Research in this area most frequently examines experiences and constructs within the prisoner population, with the social world of prison officers being somewhat neglected (Arnold et al., 2012). Despite the fact that both officers and prisoners contribute to the construction of the prison culture, the extent of the research appears to exclusively explore patterns of masculinity amongst prisoners (Oliffe et al., 2018).

Until late 2021, the limited research in this area had only speculated on prison officers 'resistance to help-seeking, and its relationship with hypermasculine attitudes had only been researched within the prisoner population (Kupers, 2005). It is only recently that research has been published from Suffolk University in Boston, US, which used qualitative methodology through content analysis, to explore the barriers to help-seeking among correctional officers (Wills et al., 2021). A sub-theme that emerged relating to the

institutional culture was the role of the hypermasculine profile, and the extent to which it exacerbates stigma associated with seeking help for mental health difficulties. Fear of being perceived as 'weak' was determined to be one of a few barriers to seeking help, and it was concluded that the hypermasculine culture perpetuated within the prison institution actively discourages help-seeking behaviours for prison officers, irrespective of gender (Wills et al., 2021).

Research Aims

Prison officer wellbeing is of paramount importance to staff retention (Fusco et al., 2021), job satisfaction (Armstrong et al., 2015) and performance (Kinman et al., 2016). Whilst research within this population is gaining traction, it is important that attention is given to exploring further the potential barriers to help-seeking. This study aims to build on preliminary research in this area, developing a fuller understanding of prison officers' perceptions and experiences of help-seeking, and to explore whether hypermasculinity may act as a barrier to those who need wellbeing support but are not accessing it. Results from the study could inform appropriate recommendations and review of current policies and practices.

Based on these aims, the following hypotheses will be tested:

(1) Amongst prison officers who are clinically anxious and/or depressed (as measured by the HADS; Snaith & Zigmond, 1984) levels of hypermasculinity (as measured by the Hypermasculinity Inventory; Mosher & Sirkin, 1984) will be significantly higher for those who have never accessed support.

(2) Hypermasculinity score will be significant associated with help-seeking in prison officers.

METHOD

Design

The research primarily adopted a confirmatory data analysis approach through the testing of specific hypotheses. However, due to the scarcity of research exploring the variables outlined, the research also adopted an exploratory approach; hence, no specific hypotheses regarding relationships between variables are provided beyond the main research questions. Thus, a quantitative design was deemed appropriate for the main body of the research, to explore relationships and interactions between variables. Three measures and a questionnaire were used to explore the factors identified. Furthermore, to supplement this analysis, participants also provided free-text response to give more context to their attitudes towards help-seeking. This was analysed using content analysis and is explained in more detail in the procedure.

Ethics

Ethical approval for the study was obtained from the University of Birmingham Ethics Committee and the HMPPS ethics board (See Appendix C). Consent was obtained from participants prior to completion of the study (Appendix D). Participants were required to tick a consent box, before they were able to proceed with the questionnaires. They were assured of confidentiality and informed that their job would not be impacted if they chose not to participate in the research. Confidentiality was maintained by allocating a unique code to each participant. This was to ensure that their data could be identified if they requested to withdraw. A locked copy of the data was stored on SPSS on a secure laptop. All data remained unidentifiable, participants were reminded of their right to withdraw at any time, and provided with the contact details of support services if they required them.

Participants

431 prison officers were successfully recruited to the study. For an individual to participate in the study, they were required to be a serving prison officer across the United Kingdom. Participants were recruited through a self-selection sampling method. The inclusion criteria stipulated that participants may have served as a prison officer for any length of time but must be actively in role.

Table 4: inclusion/exclusion criteria for participation

Inclusion	Exclusion
Actively serving prison officer	Do not work in prison
Work directly with prisoners	Work in a prison but indirectly with prisoners (eg. In an admin position)
Any gender	
	Not actively serving

Table 5 summarises demographic information for the sample. The majority of the sample were over the age of 45 years (63.7%) and males (71%). Recent data regarding the number of male and female prison officers working in the prison service could not be obtained; however, statistics presented by HMPPS in 2018 support the representative nature of the current sample. The majority of participants did not experience any changes to their role during Covid (64%). This information was considered important to collect, to develop a better understanding of the characteristics of the audience and the data, and to allow for more well-founded inferences to be made.

Table 5- Demographic characteristics

Demographics	N (431)	%
Age		
18-24	14	3.3
25-34	66	15.3
35-44	75	17.4
45-54	148	34.3
55-64	123	28.5
65+	4	0.9
Gender		
Male	306	71.0
Female	125	29.0
Officer rank		
Band 2 (Operational Support Grade; OSG)	21	4.9
Band 3 (Prison Officer)	261	60.6
Band 4 (Supervising Senior, Specialistic Officers, Offender Managers)	82	19.0
Band 5 (Custodial Managers, First Line Managers)	67	15.5
Years in service		
Under 1 year	21	4.9
1-2 years	4	0.9
2-5 years	72	16.7
5-10 years	28	6.5
11-20 years	123	28.5
21-30 years	129	29.9
31-40 years	51	11.8
Role change since covid		
Yes	149	34.6

No		282	65.4

Power analysis

The G*Power software was used to complete a power analysis. The analysis was run with a small effect size. Based on the planned statistical analysis, which includes a comparison of means as well as a binary logistic regression to explore the research questions, two separate power calculations were run to explore the minimum sample size required. This was run with a power of 0.8 (Cohen, 1988), an effect size of 0.3 and $p < 0.05$, and a minimum sample size of 219 was recommended. The final number of participants for the ICN sample was 333; therefore, the sample size can be considered ample.

Data integrity

Data were collected from 518 prison officers; however, 82 responses were incomplete, and 5 participants did not fulfil the inclusion criteria. Of the 5 participants, 3 were healthcare assistants, and 2 were prison officers not currently active in role. Listwise depletion method was used, in which the 87 unusable data sets were excluded from the analysis. The remaining 431 participants (83%) met the inclusion criteria and submitted a completed response and were used in the final analysis.

Procedure

The demographic questions and the measures were inputted into Qualtrics survey software and participants were recruited through a self-selecting sampling method. The Prison Officer Association (POA) was contacted and informed about the research, and they agreed to email out the website link to their members. The POA is the largest union in the UK, representing over 30,000 uniformed prison grades and forensic psychiatric staff across both the public and private sector (The POA, 2022). All data collection remained online, and

participation was on an opt-in basis. Prior to completion of the questionnaires, participants were shown a page of information about the study which they were required to read (see Appendix E for participant information form). If they agreed to continue participants could tick a box to consent to proceed, or they could exit the page if they declined to participate. Participants were then invited to complete the EssenCES Prison Version measure of social climate (Schalast et al., 2008), Hypermasculinity Inventory (Mosher & Sirkin, 1984), Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1984), and a specially designed questionnaire exploring help-seeking intentions and behaviours. All measures are detailed below. Participants were able to withdraw from the study at any point.

Following completion, participants were taken to a debrief screen (Appendix G), where they were generated a unique code which would enable their data to be identified if they wanted to withdraw. The survey link was open for 10 weeks, to generate as many participants as possible. Within this time, two prompt emails were sent out by the POA, to remind those who were interested in participating. Participants had until 1-week post-closure to withdraw their data, before data analysis would commence and this would no longer be possible.

Treatment of data

After data collection was completed, the data were exported from the survey software into the Statistical Program for Social Sciences (SPSS) Version 28.0, database in an anonymised format. Qualitative responses were extracted, and key themes were identified. Frequency of responses referencing specific topics were recorded, and key quotes capturing the essence of each theme were highlighted to use as evidence to support the findings.

MEASURES

To explore the hypotheses stated, data were collected using the self-report instruments described below.

Social climate: EssenCES-prison version (Schalast et al., 2008)

The EssenCES- prison version (Schalast et al., 2008) is a 15-item scale (with two additional non-scored items), designed to measure social climate and atmosphere. The measure examines three aspects of the prison environment: 'Inmate cohesion' 'Experienced Safety' and 'Hold and support'. 'Inmate Cohesion' refers to the degree to which mutual support typically seen as a characteristic of therapeutic communities is present, 'Experienced Safety' encompasses the perceived sense of threat and violence, and 'Hold and Support' is the extent to which staff care about each other, as well as the progress of prisoners (Schalast & Tonkin, 2016). The items are rated on a 5-point Likert scale, ranging from 1 (not at all) to 4 (very much). Scores on each subscale can generate a minimum score of 0 and a maximum score of 20, with higher scores indicating a more positive social climate. The tool was developed and published in Germany, but has since been translated into a number of other languages. The first version (The EssenCES) was designed exclusively for use in forensic mental health settings, but it has since been adapted for other forensic sites such as prison (Schalast & Tonkin, 2017).

This measure has evidenced good internal consistency and reliability (Day et al., 2011; Schalast & Laan, 2017), and has been validated by Day et al. (2011) whose factor analysis supported the structure and loadings of the questions onto the three dimensions. This suggests that the EssenCES is an appropriate measure of prison social climate, as it enables for a baseline score to be taken, from which changes can be monitored over time (Day et al., 2011). The tool also highlights specific features of the environment that could be perceived as

counter-therapeutic; providing evidence to review the social climate in institutions where concerns exist.

The Hypermasculinity Inventory (Mosher & Sirkin, 1984)

The Hypermasculinity Inventory (Mosher & Sirkin, 1984) is one of only a few measures of exaggerated masculinity traits and is the most widely used instrument to explore levels of hypermasculinity (Burk et al., 2004). It was developed to measure a macho personality constellation. The tool is a 30-item, forced choice questionnaire measuring three components that make up the hypermasculine personality: 'violence as manly', 'danger as exciting' and 'calloused sex attitudes toward women'. The tool presents opposite-statement pairs in a forced-choice format, thus creating an all-or-nothing scenario. For example, the item "It's natural for men to get into fights" is paired with "Physical violence never solves an issue" (Mosher & Sirkin, 1984). The 'calloused sex attitudes toward women' dimension was excluded for the purpose of this research, as this feature of hypermasculinity was not deemed directly appropriate to the research aims. With items measuring this factor removed, the questionnaire consists of 20 questions, 10 items for the 'violence as manly' dimension, and 10 items for the 'danger as exciting' dimension. Scores can be totalled or examined according to individual dimensions. Higher scores indicate higher levels of hypermasculinity. In the current study, the highest obtainable total score is 20, with 10 being a highest obtainable score for individual dimensions.

The measure has evidenced good external validity when correlated with other related measures of general aggression, delinquency and substance misuse (Mosher & Sirkin, 1984), and excellent internal consistency as confirmed by the authors, as well as other researchers in the field (Sullivan & Mosher, 1990; Burk et al., 2004; Peters et al., 2007). The tool is not

without its limitations and full critique of the measure can be found in chapter 4.

The Hospital Anxiety and Depression Scale (Snaith & Zigmond, 1984)

The HADS is an extensively used self-report screening measure of anxiety and depression symptoms. It is comprised of 14 Likert-scale items, ranging from 0 (not at all) to 3 (most of the time). The Likert scale response anchors vary for every question. Some examples include 'definitely as much 'very often', and 'as much as I always could'. Seven of the statements relate to anxiety symptoms (HADS-A) and seven to depressive symptoms (HADS-D); therefore, it is quick and easy to administer (Snaith & Zigmond, 2000). An optimal balance between sensitivity and specificity was found using a cut-off score of 8 or above for both HADS Anxiety and HADS Depression (Bjelland et al., 2002). The measure has evidenced good concurrent validity, high reliability (Moorey et al., 1991) and internal consistency (Bjelland et al., 2002).

Questionnaire exploring help-seeking attitudes and experiences

A questionnaire was specifically designed to explore prison officers' perceptions, experience and willingness to access prison wellbeing support services (See Appendix F). The questionnaire was designed based on multiple validated measures of help-seeking intentions, including Hammer and Spiker's (2018) Mental Help Seeking Intention Scale, and White et al's (2018) systematic review of help-seeking measures. The items in existing measures examining help-seeking were not specific enough for use in the prison service; therefore, they were used as a framework to guide the development of the questionnaire.

The questionnaire used a variety of styles of questions, including binary response questions, free text questions, and questions asked on a 10-point Likert scale (1 = not at all,

5= somewhat, 10 = extremely). Likert scores were not able to be totalled as the questionnaire was not validated following construction. The first item asked participants if they are accessing, or have every accessed wellbeing support services, to identify any current or previous help-seeking behaviours. Individuals who had not accessed support services were signposted to a different set of questions to those who had. The two groups were asked separate sets of questions related to their experience. Based on their response to this question, participants are then directed to another set of questions, which explores their knowledge of support services available, their perceived value and effectiveness, as well as an estimate of their willingness to seek psychological help if needed (help-seeking intentions). Other free text questions were asked to confirm participants knowledge of support services available, and to explore other factors that may make it difficult to reach out to support services. The content of the questions are outlined in more detail below.

Participants who have accessed or are currently accessing support services

The participants who were accessing or have accessed wellbeing support in the past were asked 5 questions relating to their experience. The first binary question (yes/no) was related to participant's motivation to help-seek. Participants were then asked about the services they have accessed and how helpful they found it. The third question asked participants about how important they feel wellbeing support services are, and the final question asked participants about openness to help-seek in the future as necessary.

Participants who have not accessed support services

Participants who had never accessed support were asked 6 questions related to their knowledge and perception of wellbeing support services. The first question related to their awareness of the services they are able to access, the second question examined participants

perception of their current support needs, the third question related to participant's

knowledge on how to access support services, and the fourth asked participants about their

perceived level of importance of wellbeing support services. The final questions asked

participants to rate their perceived effectiveness of support services and their willingness to

help-seek in the future if they felt they needed support.

The questionnaire was initially piloted with 5 prison officers prior to it going live. The

software worked efficiently, and the appropriate blocks of questions were presented to

participants according to whether they had or had not accessed support services. The question

flow was deemed adequate and minor changes to the wording of questions were made based on

feedback. Each question on the help-seeking questionnaire will be analysed individually and

will be labelled according to what each question is asking. For example, the statement

'Wellbeing support services are important' is measuring perceived importance of support

services.

ANALYSIS

Quantitative

Descriptive statistics were used to assess demographic characteristics of the sample.

Distribution of the data was assessed using a Shapiro-Wilk's test (Shapiro & Wilk, 1965). The

data was analysed using correlations, t-tests and a binary logistic regression in order to explore

the hypotheses outlined.

Qualitative

To analyse the qualitative questionnaire responses, these were extracted into an Excel

spreadsheet. A content analysis approach was deemed the most appropriate technique, as it

allows for the analysis of large data sets in a systematic and efficient manner, through the

identification of patterns and trends (Neuendorf, 2016). Content analysis is a research method used to analyse qualitative data through highlighting the presence of specific words, themes, or concepts (Krippendorff, 2013). This is implemented using either an inductive or deductive approach (Neuendorf, 2016). Quantification of qualitative data, also known as conceptual analysis, is seen as a central component of content analysis, through the measurement of the frequency of different categories and themes (Krippendorff, 2013). Content analysis has many benefits, including its effectiveness in providing insights into social phenomena such as attitudes towards help-seeking, as well as its application to a wide range of data sources, including written words in the case of this data set (Liu et al., 2021).

The initial stage of the data analysis involved reading and highlighting the text, to ensure familiarity of the content. An inductive coding approach was adopted, where codes were developed through familiarisation of the data, before being clustered into themes. Coding for themes (as opposed to words or phrases) appeared to be the most suitable method, as it ensured that key messages throughout the text were captured in a set of concepts. Themes emerged organically during the data analysis process, as opposed to developing pre-defined categories. During this process, the text was coded for frequency; for example, each time a theme emerged in the text, this was counted. Words that did not explicitly state the name of the category but whose words represented the theme were also included to ensure that data was not unnecessarily excluded on this basis. For example, if a participant stated that their information would not be kept private, this would fall into the theme of confidentiality, despite the participant not directing using this term.

RESULTS

Prior to analysing the data, it was necessary to ensure the assumptions were met.

Normality

Testing for normality is a prerequisite for many statistical tests, to determine if a data set is well-modelled by a normal distribution, and to inform the selection of an appropriate method of analysis. However, it should be noted that statistical tests of normality, such as Kolmogorov-Smirnov test and Shapiro Wilk are more appropriate for smaller sample sizes (n≤50; Mishra et al., 2019). This is because they are designed to test for theoretical normality, which would look like the perfect bell curve. In larger sample sizes (n>300), these tests will detect even minor, insignificant deviations from theoretical normality that are not of practical concern.

As expected, Shapiro Wilk statistic indicated that the data set was not normally distributed (P<.001). However, as the current data set is large (n = 431), the distribution statistic was disregarded, and Q-Q plots were used to ensure assumptions of normality have been met. For the anxiety and depression dimensions on the HADs, visual inspection of the Q-Q plots showed a slight positive skew for total depression score and a slight negative skew for total anxiety score. The Q-Q plots also showed a slight positive skew for perceived safety on the EssenCES, According to the central limit theorem, the sampling distribution in large samples tends to be normal, regardless of the shape of the data (Field, 2013); therefore, random samples from any distribution will themselves have normal distribution (Kwak & Kim, 2017). Whilst the slight skews should be taken into consideration, central limitation theory gives confidence that the planned statistical analysis can be commenced.

Table 6: Means and Standard Deviations for total HADS response

HADs dimension	n (% of total sample)	n (% of clinical sample who accessed support services)	M (SD)
Anxiety	431	333 (77%)	10.13 (6.96)

Normal	114 (26.2%)		5.74 (1.39)
Clinical	317 (73.8%)	123 (37%)	10.12 (3.65)
Depression	431		3.64 (4.21)
Normal	239 (55.5%)		3.89 (2.20)
Clinical	192 (44.5%)	73 (22%)	10.79 (2.70)
Clinical for both	180 (41.7%)		-
Clinical for at least 1 (ICN sample)	333 (77%)	126 (38%)	-

Descriptive statistics and exploratory analysis

Table 6 presents the means and standard deviations for HADs scores. Of particular note, 77% of the overall sample fell within the clinical range for anxiety and/or depression (i.e. a cut-off score of 8 or above), 73.8% of participants fell within the clinical range for anxiety and 44.5% of participants fell within the clinical range for depression. 41.7% of these participants fell within the clinical range for both anxiety and depression.

Table 7: Means and Standard Deviations for EssenCES, Hypermasculinity Inventory and Help-Seeking

Measure	Dimension/items	M (SD)	Normative sample M (SD)
EssenCES	'Experienced Safety'	6.88 (4.20)	10.90 (3.70)
	'Hold and Support'	10.58 (1.47)	15.20 (3.10)
HMI	Total score	12.15 (3.95)	7.71 (5.28)
Perceptions of help-seeking (for participants who had never accessed support)	'Currently I feel like I need support'	3.99 (2.45)	-
	'I know how to access support services'	5.71 (2.87)	-
	'Wellbeing support services for prison officers are important.'	9.14 (1.54)	-
	'Wellbeing support services would be effective.'	7.52 (2.39)	-
	'If I felt I needed support, I would feel able to reach out to wellbeing support services'.	5.37 (2.84)	-
Experience of help-seeking (for participants who had accessed or are accessing support)	'I have found the support service I accessed helpful'	5.96 (2.77)	-
	'I think wellbeing support services for prison officers is important'	9.52 (1.24)	-
	'I would access wellbeing support services again if I needed them'	7.77 (2.91)	-

Note: for help seeking questionnaires, minimum possible score = 1, maximum possible score = 10.

Table 7 presents the means and standard deviations for the EssenCES and the

Hypermasculinity Inventory. On the EssenCES measure, higher scores indicate a more

positive social climate. The scores fall in the 'clearly below average' category, indicating a

negative social climate for both experienced safety and hold and support. For the HMI, scores are out of a possible 20. When comparing the means from the current study with the normative sample, participants scored higher for both dimensions and total score. This suggests that the hypermasculinity of prison officers differs from to those from the student male population. The 284 participants (65.9%) who have never accessed support were asked 6 questions related to their knowledge and perception of wellbeing support services. The higher the score, the more positive the perception of help-seeking. Overall, participants had a moderately positive perception of help-seeking,

Similarly, the 147 participants (34.1%) who had not accessed or were currently accessing support were asked 3 questions relating to their experience. The higher the score, the more positive their experience of help-seeking. The descriptives indicate that participants had a mostly positive experience of help-seeking, with a mean score of 7.75 /10 (SD = 2.31). Of these participants, 101 (69%) stated that accessing wellbeing support services was their own choice, without being told by others. The remaining 46 participants (31%) indicated that they had accessed support because they had been told to by someone.

An independent samples T-test was conducted to establish whether there was a significant difference in hypermasculinity for men and women. Levenes statistic was not significant; therefore, homogeneity of variance is assumed. The results showed that there was no significant difference in hypermasculinity for males (M=3.88, SD=3.50) compared to females (M=3.06, SD=3.24; t(331) =1.97, p =.446).

Relationship between EssenCES, HADs scores and hypermasculinity

Spearman's Rank correlations were used to analyse the relationships between anxiety and depression (as measured on the HADS and analysed as two separate clinical needs) and Experienced Safety and Hold and Support, (perceived social climate as measured on the EssenCES). This statistical test measuring the relationship between variables was assessed to be the most appropriate for use, as it can be used on ordinal data, as well as non-normally distributed data. Table 8 presents the correlation matrix for the study variables. Results indicated a small, negative correlation between experienced safety and anxiety ($r(431) = -.23$, $p < .001$): As experienced safety decreased, anxiety increased. A significant negative correlation was also found between experienced safety and depression ($r(431) = -.19$, $p < .001$). Similarly, a small, negative correlation was observed between Hold and Support and Depression ($r(431) = -.13$, $p = .005$). Finally, there was no significant relationship observed between Hold and Support and Anxiety ($r(431) = -.09$, $p = .051$).

A second spearman's correlation was also conducted to examine whether there is a relationship between hypermasculinity and perceptions of social climate. The correlation between hold and support and hypermasculinity was not statistically significant, ($r(431) = -.11$, $p = .35$). Furthermore, no significant relationship was observed between hypermasculinity and safety ($r (431) = -.03$, $p = .571$).

Table 8: Correlation matrix for study variables

Variable	M (SD)	1	2	3	4	5
1. Experienced Safety	6.88 (4.20)	-				
2. Hold and Support	10.58 (1.47)	**.15**				
3. Anxiety	10.13 (6.96)	**-.23****	**-.09**	-		
4. Depression	3.64 (4.21)	**-.19****	**-.13***	**.601****	-	
5. Hypermasculinity	12.51 (3.95)	**-.03**	**-.11**	**.778**	**.13**	-

The Indicated Clinical Need (ICN) group

The sample of most interest in the current study is the group of participants who scored within the clinical range for anxiety and/or depression on the HADs (ie. The ICN group). More specifically, we are interested in developing our understanding of ICN participants who are not accessing support services.

What proportion of the ICN sample are accessing support services?

Table 9: percentage of ICN participants who accessed or did not access support

Group	n (%)
Total ICN sample	333 (77%)
Accessed support	126 (38%)
Not accessed support	**207 (62%)**

Table 9 shows that of the 333 ICN participants, nearly two thirds were not accessing wellbeing support services (62%). Of the 62% ICN prison officers who had not accessed support, 146 (71%) were male and 61 (29%) were female. This sample is considered the population of interest in the current study, as these individuals fall with the clinical range for anxiety and/or depression but are not accessing wellbeing support services.

Is there a difference in hypermasculinity for ICN officers who access support services or not?

An independent samples t-test was conducted to establish whether there was a significant difference in hypermasculinity scores, between ICN prison officers accessing support and ICN prison officers not accessing support. Levenes statistic was significant; therefore, homogeneity of variance cannot be assumed, and this assumption has been

violated. To address this, the t-value was taken from the adjusted figure 'equal variance not assumed'. The results of the analysis indicated that there was a significant difference in hypermasculinity, with individuals not accessing support services (M=4.41, SD=3.70) scoring significantly higher on the hypermasculinity measure, compared to prison officers who access support (M=2.39, SD=2.51; t(333) =-5.41, p <.001).

Is hypermasculinity associated with help-seeking in ICN prison officers?

To investigate whether hypermasculinity is associated with help-seeking attitudes in prison officers who fall into the clinical range for anxiety and/or depression, a binary logistic regression was conducted. In order to ensure this form of analysis is appropriate, a number of assumptions need to be met. These will be discussed in turn.

Linearity

The first assumption of linear regression is that the relationship between the variables can be characterised by a straight line. This can be verified through examination of scatterplots.

Multicollinearity

The data should not show multicollinearity as this would mean they were highly correlated to one another. If this occurs, there will be difficulties establishing which variables contributes to the variance in the data. If the VIF value is greater than 10, or the Tolerance is less than 0.1, then this indicates multicollinearity. Analysis of collinearity statistics show this assumption has been met, as the VIF scores for all independent variables were below 10, and tolerance scores above 0.1.

The values of the residuals are independent

This assumption is tested using Durbin Watson statistic. To meet this assumption of independent errors, this value should be as close to 2 as possible. The data met the assumption of independent errors (Durbin-Watson value = 2.05).

Homoscedasticity

Data demonstrate homoscedasticity when the variance of error is constant. This is important in regression analysis because although it does not cause bias in the coefficient estimates, it does make them less precise. Homoscedasticity is analysed using a scatterplot with the residuals against the dependent variable. Visual inspections of the scatterplots indicate that assumptions for homoscedacity have been met.

Normally distributed residuals

Examination of the Predicted Probability (P-P) plot indicate normally distributed residuals, therefore this assumption has been met.

Significant outliers

Significant outliers can place undue influence on your model, making it less representative of your data as a whole. Cook's distance was used to identify any influential outliers. Any values over 1 are likely to be significant outliers and should be removed from the analysis. In this case, there were no significant outliers, as every value fell below 1.

As in any regression model, the aim is to construct a good model that best describes the relationship between the dependent and independent variables (Shallcross & Ahner, 2020). Forward selection method was used to develop an optimal regression model along with investigation into variables associated with help-seeking. This is an important part of

analysis, as it ensures that the most key factors are included in the final model and count

towards the explained variance. The forward selection process involves adding factors into

the model one at a time, starting with those of highest theoretical importance. The factors

with high correlations to the dependent variable were added next.

In keeping with the research aims, the first factor added to the model was

hypermasculinity. This factor also had the highest correlation with help-seeking. Other

factors also included in the model were 'hold and support' (Bretherton, 2022; Tambling et al.,

2022), anxiety and depression scores on the HADs (Tambling et al., 2022) and age

(Bretherton, 2022). The choice of factors was grounded in the literature, with research

showing that those who are higher in anxiety and depression and more likely to help-seek

(Tambling, 2022). Furthermore, a recent study by Bretherton (2022) found that higher levels

of support predicted non-use of support services, with older adults less likely to help-seek.

The binary logistic regression model was used to identify the factors that were

associated with help-seeking in ICN prison officers. The dependent variable in the regression

was help-seeking. This factor was binary (participants had accessed support or not accessed

support); therefore, a binary logistic regression was conducted. Following the forward

selection process, 6 independent variables were included in the model (hypermasculinity,

anxiety, depression, hold and support, safety and age); however, all but the hypermasculinity

factor were non-significant and did not contribute to the model. As such, these were removed.

The logistic regression with hypermasculinity included in the model and help-seeking as the

outcome was statistically significant, $x2(1) = 30.64$, $p < .001$, with hypermasculinity

explaining 12% ($r^2 = .120$) of the variance in help-seeking. Increased hypermasculinity was

associated with decreased likelihood of help-seeking – for every .22 increase in

hypermasculinity scores, participants were significantly less likely to access wellbeing support services.

Table 10: Binary logistic regression results for factors entered into the model

Variable	B	S.E.	95% CI		p
			LL	UL	
Constant	.50	.11			**<.001
Hypermasculinity	.22	.04	1.12	1.35	**<.001
Anxiety	-.08	.04	.84	1.00	.075
Depression	-.06	.04	.88	1.00	.102
Hold and Support	-.12	.09	.74	1.06	.181
Safety	-.02	.03	.92	1.04	.478
Age	1.59	.11	.95	1.45	.147

QUALITATIVE DATA ANALYSIS

When participants completed the help-seeking questionnaire, they were categorised into two groups: those who were accessing or had accessed support and those who had never accessed support. Those who had no experience of support services were asked to rate statements about their perceptions of help-seeking. One of these statements was 'If I felt I needed support; I would feel able to reach out to wellbeing support services.'. The participants who scored between 'not at all' and 'somewhat' on this statement (ie. they were unlikely to access wellbeing support services if they needed to) were asked to provide a qualitative response about what would make it difficult to reach out to support services. 132 participants provided a qualitative account of the barriers to accessing wellbeing support services.

When examining responses, a number of reoccurring themes emerged. These are presented, alongside the frequency in which they were referenced in table 11. Each theme will be discussed in turn.

Table 11: themes and frequency of responses for why participants would find it difficult to access support services

Theme	frequency
Trust and confidentiality	51 responses (38%)
Stigma	38 responses (29%)
Accessibility	34 responses (26%)
Feeling uncared for	24 responses (18%)
Macho prison culture	18 responses (14%)
Perceived effectiveness	15 responses (11%)

Trust and confidentiality

Over a third of participants (38%) made reference to a lack of trust in the prison system, and wellbeing support services to keep their information confidential. Many participants expressed a fear that if personal details regarding their mental health, or difficulties coping were disclosed to their managers and colleagues, that this would be used against them for future promotions. One participant stated, 'feel like this would be used against me for future roles and jobs if for instance, needed time off after being assaulted, may be looked over for roles such as TORNADO or S/O.'

Other participants also feared that if others found out that they were struggling psychologically, that this would put them at risk of losing their jobs.

119

One participant reported,

> I have asked for help and support from the management team in the past and I was met
> with the answer that they believed I could no longer do my job and the senior manager
> was going to sack me his words. I do not want to access support as it may be used
> against me again.

Another participant wrote about their experience of a confidentiality violation when they attempted to access support. They stated, 'I tried to access the PAM assist and not long after I submitted the request for help my supervisor seemed to know about it. And then my colleagues found out and they thought it was funny. It was horrible and it made my mental health worse.' Another participant expressed that they had witnessed the negative repercussions experienced by a colleague who accessed wellbeing support services, which was enough to deter them from ever reaching out for help. They said, 'I would never use the support services. Nothing good ever comes from asking for help in the prison service. People find out your business and you suffer for it I have seen colleagues bullied out of the job for mental health issues.'

Accessibility

Accessibility issues appeared to be a salient barrier to accessing wellbeing support, with 25% of participant responses making reference to this. The majority of these participants were unsure how to initiate the process of accessing help and were uncertain about the services and resources available to them. One participant said, 'I don't know where or who to reach out to' and another stated that there was a 'lack of information and help regarding this'. Another accessibility issue raised by participants was not having the time during the day to make contact with services because they are too busy completing tasks. A participant stated, 'Finding time to do this can also conflict with work duties…'. Another participant said, 'Also finding time to make contact as this is impossible during a working day.'

Macho prison culture

13% of responses talked about how the macho prison culture perpetuates an unwillingness to access mental health support. A small number of participants used this terminology, with one participant, stating that 'it's the male macho culture. You just get on with it.' Another participant expressed a perspective on help-seeking that could be perceived as hypermasculine. They said, 'while mental health support is essential, I think a certain amount of emotional resilience is required. Too many people are going off with mental health issues for what appear to be minor issues.' The majority of participants made indirect references to a macho prison culture, expressing that they feared being perceived as weak and less effective at their job. 12 participants said, 'you don't want to be seen as weak or can't cope…'. Another participant referred to being mentally strong as a quality of a 'good leader' and stated that they need to 'appear strong' so that it does not affect the morale of officers in their care.

Stigma

Stigma surrounding mental health issues or feeling unable to cope was the second most prevalent response, and the majority of participants referring to stigma also made reference to problematic hypermasculine attitudes, such as being perceived as weak. Some participants simply stated, 'stigma' without going into further detail. One participant who expanded on this said, 'The stigma of being labelled a fragile for taking time off work for mental health reasons.' Other participants made indirect links to stigma, stating that they would not access support due to feeling 'embarrassed' and 'ashamed'. One participant expressed, 'it is so hard to admit you need help or are struggling at work. I know I'd be seen as a failure and labelled as fragile'. Another participant stated, 'I would not feel comfortable speaking with the establishments staff care team as one, I know most of them and would feel they would in some way judge me or think it was amusing and share with others.'

Perceived effectiveness

11% of responses mentioned the perceived effectiveness of support services, with all participants expressing a negative view. Most of these beliefs about the efficacy of psychological support services stemmed from having worked with colleagues who had not had a good experience. One participant stated that 'previous people who have experience with them say it's not useful or effective' and another said, I just don't believe the service is effective'. One participant shared a personal story which puts their mistrust in the effectiveness of wellbeing interventions into context. They said, 'I have known a close friend/officer who knew how to access all this help but still upon retirement committed suicide. Not all these services will be effective for everyone.'

Feeling uncared for

18% of responses made reference to feeling uncared for on a systemic and individual level. Some participants expressed beliefs that the prison system as a whole does not care about their emotional wellbeing, with one participant stating, 'I wear a batman suite when in work, prison service support is just for show.' Other respondents said that they believed the offer of support was a 'tick box exercise', and that 'the prison service do it because they have to'. One participant expressed feeling devalued by the system, stating:

'I don't feel that they are any good, it's just HMPPS ticking a box they have little or no regard for their frontline staff. We are just a number, if I left tomorrow after 26 years' service no one would remember me within a week.'

The majority of participants who touch on this theme mentioned a lack of support from their managers. Four participants expressed worries that they would be made to feel like a hindrance by their managers, and they believed that their superiors would act as barrier and make accessing support challenging. Other participants stated that if they accessed support, supervisors would not take it seriously and may not employ guidance provided by psychological support services with regards to improving ways of working to increase wellbeing. One participant said, 'there's no point. Even if I did, management teams wouldn't listen to advice given by the support services anyway'. Another participant stated, that their superiors were the biggest barrier to their choice to access support, stating, 'attitudes towards staff by the senior managers cause the most anxiety and it is those who will be informed of any apparent weakness.'

DISCUSSION

The current study aimed to develop an understanding of prison officers 'attitudes towards, and experiences of help-seeking, and to explore whether hypermasculinity is

associated with help-seeking in individuals who need psychological support but are not accessing it.

Exploratory findings

Initial exploration of the data was a precursor to the main research questions, providing a baseline understanding of the sample, and facilitating a more comprehensive interpretation of the findings. The relationship between gender, anxiety and depression was investigated, which found that male participants were significantly more likely than female participants to be experiencing symptoms of depression. More specifically, nearly half of the males in the sample were in the indicated clinical need group for depression, compared to one third of women. This is an interesting finding and challenges existing literature, which consistently reports a higher prevalence of depression for women in the general population (Albert, 2015; Cyranowski et al., 2000). Although female prison officers are exposed to the same gender-normative environment as men, one possible explanation for this finding could be the contrasting constellation of challenges faced by prison officers, based on gender. Embedded within the macho culture is the belief that hypermasculine traits are a demonstration of strength, capability and competence (Gripp & Zaluar, 2017). Consequently, female officers may be perceived by their male counterparts as lacking the valued, masculine traits; therefore, seen to be less capable of their role and so more likely to be supported by male officers (Brown et al., 2020). Furthermore, women are significantly more likely to articulate their distress; thus, receiving help and support, even if this is not in a formalised capacity (Wilhelm, 2009). These two factors, alongside other intricacies in the differing experiences of male and female prison officers may be buffering symptoms of depression in female officers.

124

To our knowledge, this is the first study of its kind to quantitatively explore hypermasculine traits in a female prison officer population. Whilst hypermasculinity has long been observed as a pattern of traits that are exclusively experienced by males, society is becoming more understanding of the fluidity of gender expression (Claire & Alderson, 2013). There have been two school of thought regarding the experience of female prison officers operating in a male-dominated, macho environment. Findings from a recent study found that some female prison officers were not able to fully acclimatise to the hypermasculine culture and encompass male-attributed traits; however, others displayed behaviours indicative of hypermasculinity, suggested that attempts were made to conform to the prescribed culture (Brown et al., 2020). The current study showed that there was no significant difference in levels of hypermasculinity between male and female officers. This is a significant finding, because it emphasises that females can all fall on the hypermasculine spectrum, and that traits do not appear to be exclusive to the male population. On the surface, this would support the latter experience that female officers may stick to the status quo because it is the 'path of least resistance' (Brown et al., 2020; Johnson, 2005). Johnson's (2005) 'path of least resistance' paradigm recognises that an oppressive, male-dominated, system eventually becomes the 'ordinary' and the entrenched hypermasculine culture becomes somewhat invisible to those embedded within it.

However, another possible explanation for this finding may relate to the quality of the Hypermasculinity Inventory tool (Mosher & Sirkin, 1984) used to measure the phenomenon. It is important to recognise that this tool was developed in 1984, and since then, society's perception of hypermasculinity has transformed into a more assimilated framework (Burk et al., 2004). The normative sample used for the tool were male, and evidently the measure was not intended for use with females. As a result, it is possible that the Hypermasculinity

Inventory may not be adequately capturing the newly constructed theoretical underpinnings of hypermasculinity, which may explain why gender differences were not observed. Further research is essential to provide the groundwork of our understanding of ʻfemale hypermasculinity ʼand its evolution within the prison environment, as well as to build on existing literature exploring a more sophisticated and contemporary construct of hypermasculinity.

Other relationships that were explored within the study were between perceptions of social climate, wellbeing and hypermasculinity. Although causal relationships between these factors could not be confirmed in the present study, the findings align with the literature, which suggests not only a linear relationship between psychological health and social climate, but also proposes that social climate plays a key causal role in the health and wellbeing of staff working in forensic services (Schalast & Tonkin, 2016). Prison officers are under immense pressure through exposure to physiological and psychological threats on a daily basis (Spinaris et al., 2012), and there is a high prevalence of PTSD, depression and anxiety when compared to other occupational groups, and the general population (Regehr et al., 2021). Particularly for individuals who are already experiencing distress, a reduced sense of safety and a lack of support from colleagues is only going to perpetuate mental health problems (Boudoukha et al., 2013).

Similarly, a relationship was found to exist between hypermasculinity and social climate. There is limited existing research exploring the impact that a macho culture has on the atmosphere in which prison officers work. As such, the literature base would benefit from further exploration in this area, to identify if hypermasculinity is having a detrimental impact on prison officers' experience in the prison, and the potential existence of a bi-directional

relationship between hypermasculinity and social climate, that may well perpetuate and exacerbate a toxic work environment.

Population of interest – ICN prison officers

The population of greatest interest within the current study were participants that had an identified clinical need (ICN) for anxiety and/or depression. The descriptive statistics highlighted some important findings regarding the psychological wellbeing of participants. Over three quarters (77%) of participants fell within the clinical range for anxiety and/or depression; however, only 38% were accessing support services to address their difficulties. This is a critical finding as, left unaddressed, mental health difficulties can lead to psychological disability, a lower quality of life, reduced ability to work and a high risk of suicide (Kasper, 2006). It should be noted that although it is possible that the self-selection sampling method may have attracted prison officers who are struggling to cope, as the study may feel more relevant and important to them, the research is still capturing information about the sub-group of prison officers who are most 'in need' and require targeting in terms of interventions.

Results showed that ICN prison officers scoring higher for hypermasculinity were significantly less likely to access support. The findings are consistent with both theories of hypermasculinity and other research papers exploring the relationship between help-seeking and wellbeing. A recent qualitative study identified hypermasculinity as a barrier to help-seeking, as participants associated accessing support with weakness, sensitivity and vulnerability, which were perceived to be harmful for prison officers working in a high-risk environment (Wills et al., 2021). Participants reported feeling that, if they admitted they needed support, this would indicate that they are unable to be effective in their role. As such,

the hypermasculine prison culture discourages emotional expression and invalidates any feelings that could be perceived as 'non-masculine', whilst simultaneously propagating characteristics such as dominance and fearlessness (Crawley, 2004). As long as this toxic culture is left untreated, prison systems are likely to see a workforce with hidden, chronic and pervasive mental health difficulties, which presents itself as high staff turnover rates (Lambert & Paoline, 2010), mental health related absences (Ministry of Justice, 2019) and high suicide rates (Cleary, 2005).

Arguably the most salient findings concern the relationship between hypermasculinity and help-seeking. The results provide evidence to support a relationship between hypermasculinity and choice to access support services. Recent research has shown that prison officers who experience acculturation into the macho prison environment, are likely to adopt unhelpful attitudes and beliefs relating to the importance of psychological services, which is likely to deter them from accessing support, even when they need it (Harris, 2021). However, whilst little is known about the extent to which hypermasculine traits are imported or built, it has been recognised in the literature that the recruitment process can unconsciously translate hypermasculinity into level of competence to be a prison officer (Crawley, 2004; Wills et al., 2021). The current analysis was not able to tease out this level of depth and understanding about the origins of the hypermasculinity epidemic within prisons; therefore, a future qualitative analysis is recommended.

Key findings from the qualitative free-text responses were presented to identify potential barriers to accessing support, and to explore why participants who have never accessed support may find it difficult to do so, even if there is a clinical need. The most frequently cited barrier was a lack of trust in the organisation and the people in it, with prison

officers expressing fears that their engagement and personal information would not be kept confidential. Another theme that emerged was feeling uncared for and devalued by the prison system, but also by their superiors. The presence of both these themes support the findings of the quantitative analysis, in which prison officers fell in the 'clearly below average' category for safety and hold and support, providing further evidence for prison officers' negative experience of the social climate.

Another salient barrier highlighted was stigma, particularly embarrassment and shame about reaching out for support. Hypermasculinity creates both a public and self-stigma towards individuals who are perceived as anything less than 'tough'. This, alongside self-stigmatisation and shame has been shown to increase an individual's propensity to bypass treatment, to ensure they avoid being labelled as 'unmanly '(Staiger et al., 2020).

Accessibility was the third most frequent topic that participants referred to, with a considerable number of individuals expressing a lack of knowledge about the process of accessing services and the support available. Participants also made reference to their perception of mental health support services as being ineffective. Whilst the prison system does offer a range of support services (Employee Assistant Programme, PAM assist, TriM care team), it is possible that these may not be being widely advertised, and that managers may not have these in their field of vision to recommend to prison officers who may be struggling. Furthermore, although policies and process will be in place for those in managerial positions to signpost or refer to support schemes, it is possible that hypermasculinity may impact on the way this plays out, and the potential detour from formal polices and best practice.

These findings are supported by a recent, more in-depth qualitative analysis conducted by Wills et al., (2001), who examined barriers to help-seeking in prison officers and the influence of culture and structure. Stigma and hypermasculinity were both identified as prominent factors within the institutional culture. Furthermore, issues regarding confidentiality, and punitive responses towards those who expressed having mental health concerns, were also shown to have deterred prison officers from accessing and engaging with wellbeing support services. As such, the creation and fostering of a help-seek promoting environment needs to take the form of a top-down approach, to allow optimal chance to dismember the toxic attitudes that permeate within the prison walls.

LIMITATIONS

The current research is not without its limitations. The first point to highlight is the specially designed help-seeking questionnaire. Whilst this was designed based on multiple validated measures of help-seeking intentions (Hammer & Spiker, 2018; White et al., 2018), the questionnaire was not validated to ensure that it was suitable for the intended purpose. However, this limitation was considered and acknowledged throughout the stages of development and analysis and has never claimed to measure a specific social construct. To ensure that this questionnaire did not invalidate the research, it was agreed that the questions would not be summed to create a total scale score, given the questions had not been factor analysed. Questions were examined as stand-alone items, with the content of the question taken to form the topic (eg. 'I think support services would be helpful' = perceived helpfulness).

As noted in the method and discussion, participants were recruited through self-selection sampling method. This allowed for the collection of a large sample size and

efficient data collection process. However, this increases the risk of self-selection sampling

bias, which may have attracted prison officers who are struggling to cope, and likely over-

inflating the magnitude of the health concerns; consequently, limiting the generalisability of

the findings. However, being able to obtain a snapshot in time of the mental health

difficulties and barriers to help-seeking that the sample faced, is still beneficial, as the

recommendations remain relevant beyond the participant sample.

The next limitation relates to the item presentation of the Hypermasculinity Inventory.

The forced-choice format creates an all-or-nothing scenario, which does not allow for the

respondent to give a more precise answer that reflects their beliefs (Burk et al., 2004). Whilst

other measures have been developed to mitigate this issue, such as the Auburn Differential

Masculinity Inventory (ADMI; Burk et al., 2004) which uses a Likert-style response, the

questionnaire is extensive (60 items) and risks both response bias and high non-responding

rate (Smith, 2004). Another limitation of the Hypermasculinity Inventory is that it only

captures hypermasculinity at one set point in time. As a result, the current study does not

have a depiction of whether prison officers entered into the role with existing hypermasculine

traits, or whether these were adopted over time in response to exposure to the prison culture.

As such, it is recommended that HMPPS review their recruitment strategy, to ensure that the

enrollment of new officers is fair and unbiased.

Although the validity and reliability for the Hypermasculinity Inventory is well-

established, as well as being the most commonly used tool to measure this concept, it is

important to recognise that it is not without its disadvantages. A significant concern relates to

year of development, and subsequently, the language and concepts used are likely to be

outdated and not entirely representative of contemporary masculinity. For instance, some of

the items may be seen as perpetuating traditional gender roles and norms that are problematic in today's society (Levant et al., 2021). As such, it is the Hypermasculinity Inventory will be critiqued in chapter 4 to acknowledge its limitations and potential biases. Overall, the use of the Hypermasculinity Inventory in this study provides a useful starting point for examining hypermasculinity, but it is important to recognise its limitations and consider alternative measures in future research.

CHAPTER 4: CRITIQUE OF A PSYCHOMETRIC

The Hypermasculinity Inventory (Mosher & Sirkin, 1984)

ABSTRACT

This chapter examines the Hypermasculinity Inventory (Mosher & Sirkin, 1984), a long-established but actively used measure of hypermasculine attitudes and values. This was achieved through exploring the literature surrounding the concept, followed by a description of the scale and how it was developed. The characteristics of the measure and psychometric properties were examined. Finally, the chapter concluded with some recommendations regarding how to achieve further validation of more recently developed scales.

INTRODUCTION

There is a significant gap in the literature that neglects the utility and appraisal of measures assessing hypermasculinity (Powell et al., 2018). Within the past 37 years, a limited number of validated tools have been developed to measure the constellation of hypermasculine traits. Measures include the Hypermasculinity Inventory (HMI; Mosher & Sirkins, 1984), the Hypermasculinity Index (HMI-R; Peters et al., 2007) and the Auburn Differential Masculinity Inventory (ADMI-60; Burk et al., 2004). Whilst other tools such as the Male Role Norms Scale (Thompson & Pleck, 1986) and the Male Role Attitudes Scale (Pleck et al., 1994) exist to measure a similar concept, these instruments adopt a more generalised approach to measuring masculine ideologies, societal masculinity norms, and the male gender role; thus, they do not seek to measure exaggerated forms of masculinity (Thompson & Bennett, 2015). Therefore, this critique will only make reference to the former measures outlined, to aid the critique of the HMI.

Early work by Mosher (1971) established 'callous sex attitudes' as the only feature within the hypermasculine archetype. Mosher and Sirkin's (1984) work draws on developmental theories and cognitive-affective approaches to explicate the presence of two additional dimensions within the hypermasculinity construct. They contend that the formative years of childhood and early adolescence are pivotal in laying the groundwork for a hypermasculine personality style (Izard, 1977). For instance, children who are subjected to humiliation by their caregivers when they exhibit fear or tears may be socialised to experience shame for failing to conform to the masculine ideal. Enculturation of the masculine view that bravado is valued, often continues into adolescence, when boys are likely to face other experiences amongst their male peer group, which may promote dangerous, aggressive or delinquent behaviours. Finally, this can be seen infiltrating

perceptions of women, where hegemonic views regarding the objectification of women emerge (Mosher, 1971; Mosher & Sirkin, 1984). This theory gave rise to the development of a multi-dimensional model of the macho personality constellation, with the first developed measure constructed by Mosher and Sirkin (1984). This critique will examine the scientific properties of the measure.

Scale development

It has been proposed that the most widely used measure of the macho personality constellation in the gender literature is the Hypermasculinity Inventory (HMI; Mosher & Sirkin, 1984). The scale was developed as an extension and refinement of Mosher's (1971) inventory measuring 'sex callousness'. This preliminary work mobilised the hypermasculinity theory into a framework measuring one component of the exaggerated masculine style. Mosher and Sirkin (1984) later aimed to define other factors that form the hypermasculine constellation. Following a review of sociological theories (Izard, 1977), male peer group discussions on fighting, sex and dangerous experiences were used to create an item pool of 221 statements which were anticipated to reflect the three sub-scales. The items were administered to a male sample and then each correlated with the sum of the sub-scale score. Items with the highest item-total correlation were retained. This process was repeated with a second male sample to identify and remove less useful items that were contaminating the total score (Mosher & Sirkin, 1984). The top items indicating excellent discrimination were selected to form each sub-scale. A factor analysis confirmed that the inventory had a factor structure consistent with the concept of a constellation of hypermasculine traits.

Overview of the HMI

The HMI measures three sub-scales which were understood to represent the hypermasculine personality profile. Each pair of statements contains one item reflecting hypermasculine attitudes and one matched item reflecting a non-hypermasculine attitude. Participants are instructed to select the statement from the pair that best reflect their perspective. Hypermasculine responses are then totalled. The dimensions include: 'violence as manly', 'danger as exciting 'and 'callous sex attitudes'. There are 10 items in each of the three sub-scales. The authors advise to use the full inventory to generate a single score, as a way to develop a comprehensive understanding of the macho personality constellation. However, it is also possible to employ the sub-scales as individual predictive variables (Mosher & Sirkin, 1984).

Characteristics of the HMI

The Hypermasculinity Inventory (HMI) is a self-report questionnaire consisting of 30 paired items that require forced-choice responses. This type of research methodology is a popular data collection method, because it is efficiently administered and produces a considerably larger sample in comparison to other approaches; therefore, increasing the generalisability of the findings (Lavrakas, 2008). Self-report measures have been deemed a suitable methodological approach when examining human characteristics (Howard, 1994) and other constructs that are perceptual in nature (Razavi, 2001; Spector, 1994), as is the case for hypermasculine attitudes, values and beliefs. Despite this, self-report and forced choice methods are not without their disadvantages. The operational characteristics of the HMI will be dissected and critiqued.

Social desirability bias

Social desirability bias has been defined as the tendency to under-report socially undesirable attitudes or behaviours, or over-inflate responses that are deemed more socially acceptable as a way to present oneself in a favourable way (Paulhaus, 1981). There are numerous motivators which may drive an individual to choose to respond untruthfully; for example, the environment in which the data is being collected, as well as the respondent's beliefs about the nature of the research (Razavi, 2001). Both context and respondent's perception of the research purpose are highly likely to impact on the presence or absence of social desirability bias when measuring a construct like hypermasculinity. To illustrate this, women are continuing to be integrated into male-dominated workforces such as the prison system and police forces, yet hypermasculinity within these contexts is still considered advantageous (Atkinson, 2016). As such, using the HMI in these contexts is likely to generate an over-inflated response on macho personality items, whilst in many other contexts, these traits are likely to be downplayed.

During the questionnaire development, Mosher and Sirkin (1984) attempted to mitigate the potential for social desirability bias through the use of the Personality Research Form (PRF) Desirability Scale (Jackson, 1984). This method plays a central role in the scale validation process and is frequently undertaken by researchers wanting to test their newly developed tool (Helmes & Holden, 2003). For the measure to demonstrate that it is free from response bias, the analysis must find a non-significant relationship when correlated with a social desirability scale (Uziel, 2010). Moster and Sirkin (1984) found a significant negative correlation between the HMI and the PRF Desirability Scale ($p<.05$). Given the potential for items reflective of hypermasculinity to be considered 'too undesirable' unless paired against an equally as undesirable non-hypermasculine alternative, the researchers adopted an optimistic perspective on the result, attesting the weak (although significant) correlation to

successful statement pairings. Although the strength of the correlation was weak (r = -.18), further exploration and more rigorous scale revisions may have led to a more favourable outcome, or at least, paved the way for a more substantive hypothesis as to why a significant correlation was found.

Level of measurement: categorical data

The ʻgold standard ʼfor a scientific instrument is the implementation of a ratio scale to measure the chosen construct (Kline, 2000). Most psychological measures gather interval data (often in the form of Likert Scale), which is still considered good practice, as it allows for a wide coverage of item content and flexibility for data analysis. However, the suitability of the level of measurement used is heavily contingent on the nature of the construct, and often requires a cost benefit analysis (Boateng et al., 2018). The HMI gathers nominal data, through the use of a forced-choice question format.

Forced-choice survey questions require the respondent to make a judgement about each statement or question and to choose from one of two options (Feldman & Corah, 1960). By excluding an "unsure" response option, this approach does not accommodate respondent indecisiveness or uncertainty. The fundamental feature of this method is that it requires the respondent to answer every question in order to advance through the questionnaire (Allen, 2017). The HMI presents respondents with paired items that possess a similar level of social desirability. For example, the measure pairs a hypermasculine statement: "call me a name and I'll pretend not to hear you", with a hypomasculine statement: "call me a name and I'll call you another" of a similar nature. Respondents are then asked to choose which statement most accurately describes them. The multi-faceted forced-choice question format has been frequently used within the personality literature, as research has shown it is effective in

mitigating the impact of social desirability bias and acquiescence bias (Cheung & Chan, 2002; Kreitchmann et al., 2019; Salgado and Táuriz, 2014).

In theory, the use of forced-choice survey questions and ipsative methodological approaches within the hypermasculinity measure should reduce the risk of social desirability bias (Burrus et al., 2011). Despite the increased use of forced-choice surveys over the years, there has been limited exploration into the reliability of this format, with the majority of the research in this area centring around the validity of the scores (Xiao et al., 2017). Positively, research has shown that using forced-choice statements increases truthfulness and operational validity; which is considerably more challenging to achieve when utilising other question formats, such as the Likert Scale style response (Nemoto & Beglar, 2014; Bartram, 2007; Seybert & Becker, 2019). By presenting realistic, hypothetical statements alongside a choice of nominal responses, individuals can be less vulnerable to the response biases that often occur on respondent-reported questionnaires (Chen & Zhou, 2017). Mosher and Sirkin (1984) also provide further logic behind the force-choice responses, as well as the overall structure of the tool. They defend the design by proposing that the choice between a pair of statements mirrors the role of decision-making in everyday life, that may be driven by hypermasculine attitudes and values.

However, whilst the advantages are important to note, using force-choice responses comes at the detriment to the scale reliability and effectiveness of the instrument (Saville & Wilson, 1991). Firstly, researchers have expressed concerns that the format results in increased reactance, where one's perceived freedom to respond freely without the restrictions of forced choice has been eliminated (Brehm, 1966). Consequently, research using these types of measures often experience high dropout rates, and poor data quality as a result of high levels of missing information (Décieux et al., 2015; Dillman et al., 2014). In addition to

this, the response format also significantly decreases the variance in the data collected (Hamburger et al., 1996). A reduction in variance of HMI responses reduces the tool's discriminability of small but potentially significant differences in underlying hypermasculine traits (Peters et al., 2007). In turn, this increases the likelihood of erroneous conclusions to be drawn and reduces the utility of the instrument (DeVellis, 1991).

Psychometric properties of the HMI

The central provision of a robust research design is that the measures selected for use have good psychometric properties (Weitzman & Silver, 2013). For this to be achieved, the properties of the instrument must measure exactly what is intended, as well as having a minimal measurement error (Shrout & Lane, 2012). The properties of the HMI and its effectiveness in meeting this criterion will be analysed in more detail.

Reliability

Kline (1986) refers to reliability as the 'quality of the measurement'. More specifically, it examines the test's ability to measure a construct consistently, over time. Ensuring that a psychometrics has high reliability is essential, because it protects against standard errors of measurement (Kline, 2013), ascertaining whether the scale measures what it has been designed to measure, and if it is appropriate for use on the selected sample population (Souza et al., 2017).

Internal Reliability

Internal reliability examines the extent to which items within a scale measure the same underlying construct (Matheson, 2019). Internal reliability is most consistently measured using Cronbach's alpha (α; Cronbach, 1951) and Corrected Item –Total Correlation (CITC) coefficients. Cronbach's alpha calculates the average inter-item correlation, and

establishes how closely related they are (Connelly, 2011). Alpha coefficients typically range from 0 to 1, with higher alpha values indicating higher internal consistency (Nunnally, 1978). A frequently cited acceptable reliability alpha coefficient is a value of 0.7 or above (Kline, 1986), and it has been widely accepted that this is an appropriate figure to use if conducting exploratory research that involves initial scale development (Nunnally, 1978). However, it should be noted that other researchers have debated that an excessively high alpha coefficient (<0.90) does not necessarily indicate a highly reliable measure, because the alpha is also affected by the length of the test. As a result, an exceptionally high Cronbach's alpha may indicate the development of a narrow and inefficient tool inundated with redundant items (Cattell and Kline, 1977).

CITC values indicate the correlation of an item and the total scale score when the item is excluded. According to Streiner et al. (2015) a good CITC value would fall above 0.2, with anything below this suggesting that the item does not discriminate well within the tool (Kline, 1986). A CITC coefficient of 0.4 or above suggests very good discrimination (Zijlmans et al., 2019).

The scale developers used a twofold approach to ensure internal consistency of the HMI. The top 30 statements out of a pool of 221 items with the highest alpha coefficient were retained, with 10 items for each subscale that had the highest item-subscale total correlation grouped. The researchers found a total Cronbach's alpha score of 0.89 (M = 11.03, SD = 6.79), with coefficients of 0.79 (M = 3.84, SD = 2.84) for 'violence as manly', 0.71 (M = 3.87, SD = 2.44) for 'danger as exciting 'and 0.79 (M = 3.33, SD = 2.63) for 'callous sex attitudes towards women'. Further studies also assessed the internal reliability of the scale and found alpha coefficients of 0.87 (Sullivan & Mosher, 1990), 0.80 (Burk et al.,

2004) and 0.79 (Peters et al., 2007). This supports the tool's internal reliability and reasonably demonstrates that the HMI measures a reliable, unidimensional construct.

When comparing the internal reliability values of the HMI to more recently developed measures of hypermasculine personality traits, the ADMI-60 also evidences excellent internal reliability, producing a coefficient alpha of 0.85, whilst the HMI-R demonstrates a slightly higher Cronbach's alpha score of 0.90. Peters et al. (2007) uses this marginally higher value to suggest that their revised measure is of increased usefulness compared to the HMI. However, as outlined above, an alpha value of this magnitude suggests potential redundancies in the tool items and may indicate that the item pool requires streamlining (Tavakol & Dennick, 2011).

Test-retest reliability

Test-retest reliability of a psychometric involves administering the same test, under the same conditions to the same group of participants, to measure the consistency of scores over time (Kline, 1986). For a measure to be considered of theoretical use, test-retest reliability correlation must be above 0.8 (Kline, 2000). Assessing the test-retest reliability is an essential part of the psychometric tool development process, as it ensures that variation in measurement is due to replicable differences between people (Arciniega et al., 2008). It is uncertain whether the authors established test-retest reliability for the measure, as it was not reported. Similarly, the test-retest reliability of the HMI-R (Peters et al., 2007) and the ADMI -60 (Burk et al., 2004) was not explicitly tested or demonstrated.

Face validity

A measure is said to have face validity if it superficially *appears* appropriate, relevant and effective at face value (Holden, 2010). It is important to acknowledge that this is the least sophisticated measure of validity, and in some cases, can negatively impact on the accuracy of the data collected (Holden, 2010). This is more likely to occur for certain tools measuring constructs that may be perceived as unfavourable. If the participant is able to detect what the test is measuring, then they be more likely to calculate their responses in order to be viewed in a positive light (Kline, 2013). Therefore, some researchers would argue that having face validity for a measure like the HMI could potentially do more harm than good.

The HMI is clear and direct, using statements such as 'It's natural for men to get into fights.'Face validity was achieved through the use of male peer group discussion, as a means to generate the statements assimilated in the instrument. Mosher and Sirkin (1984) made good efforts to ensure the measure holds good face validity, without being at the detriment of true validity. Due to the undesirable nature of the hypermasculine personality sub-dimensions, one of their concerns was that participants were likely to avoid selecting these responses and would choose the more attractive option. To counteract this, the tool developers paired the hypermasculine statements with equally undesirable alternatives. The success of this structural adaptation was reflected in the small correlation between the HMI and the PRF Desirability scale.

It could be argued that despite the processes in place to ensure the tool maintains its internal validity, the researchers could have placed more emphasis on ensuring the participants are provided with more indirect or implicit statements about their hypermasculine attitudes and values. In doing so, although the measure would have weaker face validity, it would reduce the risk of participants responding in a socially desirable way

(Fisher, 1993).

Concurrent validity

When developing a new psychometric test, it is important that it is compared to existing tools, to examine whether they are measuring a similar construct (Murphy & Davidshofer, 1998). On its own, concurrent validity has been regarded as a fairly weak assessment of validity; this is because the test can only be as good as the benchmark instrument it is correlated with (Kline, 1986). If problems exist within the original measure, then a significant correlation with the newly developed tool may just be reflecting the same inherent weaknesses. As such, it is important to examine concurrent validity in conjunction with other forms of validity (Gagnon et al, 2018). Kline (2000) provides guidance on cut-offs for acceptable coefficients, suggesting that values below 0.7 would be considered poor concurrent validity.

For the HMI to evidence concurrent validity, the items should correlate with existing scales. As this tool was the first of its kind, Mosher and Sirkin (1984) dissected their theorised hypermasculine personality constellation and used separate existing measures to correlate specific dimensions. These included a drug-use questionnaire (Kopplin et al., 1977), the Checklist of Adolescent Antisocial Behaviour (Kulik et al., 1968), a specially constructed Drinking and Behaviour Survey (Mosher & Sirkin, 1984) and the Personality Research Form (Jackson, 1974). The research found a significant correlation between the HMI and a drug - use questionnaire (r(135) = .26 p =.01), with the items on the 'danger as exciting 'subscale being the most important contributors. Similarly, significant correlations were found between the HMI and aggressive behaviour (r(135 =.65, p <.001), and dangerous driving (r(136) = .47, p <.001) and adolescent delinquent behaviour (r(135) = .38, p =.01). Finally, concurrent

validity was supported by a pattern of theoretically meaningful correlations found with the Personality Research Form (Mosher & Sirkin, 1984). However, it should be noted that other more appropriate measures could have been used to confirm concurrent validity – for example, 'danger as exciting 'is likely to be more closely linked to sensation seeking than drug use.

Since the development of newer measures of hypermasculine attitudes, researchers have used the HMI to measure concurrent validity of their newly developed tool. Burk et al. (2004) correlated the ADMI-60 with the existing measure and found a weak to moderate correlation. It is unclear whether the weak to moderate correlation between the ADMI-60 and the existing measure is due to methodological issues with the tool or whether it reflects differences in the theoretical underpinnings of hypermasculinity in the two measures. Nevertheless, this provides evidence that the HMI demonstrates excellent concurrent validity in comparison to its counterpart.

Construct validity

Construct validity assesses the extent to which the items in a tool are indicative of the theoretical concept intended to measure (Groth-Marnat & Baker, 2003). Mosher and Sirkin (1984) conducted a principle axis factor analysis - an exploratory approach often used to detect item cluster structures based on the underlying relationship (Croux, & Haesbroeck, 2000). All 30 items loaded onto the first factor, supporting the presence of a unidimensional, homogeneous variable, which was captured by the authors as the "macho personality." Eight other factors also emerged from the analysis; however, none of these aggregated to form any of the three subscales outlined in the theory. Given the methodological challenges of collecting adequate, accurate data in a single study, it can be expected that on occasion,

theoretical ideas do not map neatly onto the factor loadings (Tavakol & Wetzel, 2020).

However, the authors made a limited attempt to defend their decision to retain the model and

hypothesise why their findings were not as expected. The authors, as well as other

researchers have continued to use the three theoretically conceptualised hypermasculine

personality traits, despite this problem (Krahé & Fenske, 2002; Peters et al., 2007).

Mosher and Sirkin's (1984) inability to detect the hypothesised three factors may

have been due to their inappropriate choice of analysis. Similarly, in the development of the

ADMI-60, Burk et al. (2004) used a principle-axis factor analysis to re-examine the factor

loadings of the HMI. Most commonly, exploratory factor analyses are used on data with

continuous outcomes (eg. Likert scale data) and is not deemed appropriate for use with tools

like the HMI, which generates nominal data (Mislevy, 1986). It may have been the case that

if a more appropriate statistical analysis was selected, such as the latent class analysis, the

researcher's may have detected latent groups more consistent with the proposed

hypermasculine theory (Peters et al., 2007). Therefore, it is difficult to conclude with

confidence whether the issue is due to poor statistical decision-making, or whether test items

simply do not reflect the theoretical construct.

During the construction of the HMI-R (Peters et al., 2007) and the ADMI-60 (Burk et

al., 2004), appropriate statistical tests were used to support the tool developer's revised

constructs of hypermasculinity. These results were a little more promising, but again, were

not without flaws. The item loadings for the ADMI-60 were somewhat more in alignment

with the researchers updated theory of hypermasculinity, with five factors emerging that

reflected sub-scales such as interpersonal dominance and aggression. However, there were

considerable issues with the overlapping of items, and subsequent difficulties interpreting the

factors (Burk et al., 2004). Consequently, the tool developers recognised that this instrument is very much in its infancy and advised that the subscales should not be used in practice, until further replication of the factor structure is completed.

In comparison, the HMI-R evidencing a significantly improved factor analysis solution that explained more of the variance and proved a better fit with Mosher and Sirkin's (1984) theory. Overall, the HMI-R appears more robust within this area, compared to the HMI and the ADMI-60.

Content Validity

Content validity refers to whether all items within a measure reflects all aspects of the construct being examined (Kline, 2013). This is usually measured through expert judgement from individuals who have a sound knowledge of the construct (Sireci, 1998). The authors were using theory to introduce a new construct; therefore, they made no reference to content validity in their research paper. During the development of their hypermasculinity tools, Peters et al. (2007) and Burk et al. (2004) commented on potential gaps in the measure. Peters et al. (2007) highlighted that theories suggest invoking fear is a key component in the construction of the hypermasculine personality; a factor that had not been considered when developing the HMI. As such, they revised the three components of the construct. Similarly, Burk et al. (2004) redefine the construct to include the devaluation of emotion.

Given there is limited research in this area, and the continually developing theoretical underpinnings of hypermasculinity, it is difficult to conclude the extent to which content validity has been achieved. However, it is evident that further research and development is required to ensure future measures are representative of the entire construct.

Temporal validity

A significant criticism of the HMI relates to its temporal validity. Temporal validity refers to an instrument's ability to generate data that is generalisable over time (Munger, 2019). A measure can be considered high in temporal validity if the findings remain relevant both historically, at the present time, and in the future (Kline, 2013). Given the shift in societal understanding of hypermasculinity, it is likely that its underlying constructs have changed considerably since the development of the tool. As such, it could be argued that more recent research that has utilised this measure maybe less relevant and generalisable to the society we live in today.

Normative samples

The final criterion that reflects a good psychometric test is having normative data. Normative data enables researchers to establish a baseline distribution of measurement, in which they can compare participant's scores (O'Connor, 1990). Mosher and Sirkin (1984) provided normative data from a sample of 135 male students; however, research should establish further normative samples for other populations of interest.

CONCLUSION

This chapter examined the psychometric properties of the HMI. In summary, Kline (2000) states that a good psychometric test must withstand rigorous reliability and validity testing, and have normative data, where appropriate. The HMI meets some of this criteria because: (1) it demonstrates excellent internal reliability as a whole and across the three subscales, (2) it has excellent concurrent validity as evidenced by significant correlations with other tests measuring similar components, (3) it appears to have good face validity.

It is promising that researchers have begun to address the existing problems with reliability, validity and normative data of the HMI, through the development of revised measures. However, more time should be spent on validating recently developed measures. Interestingly, despite the HMI-R and the ADMI-60 looking promising, researchers are not widely transitioning to using the newly developed measures until further methodological testing has been undertaken, as outlined as a necessity by the authors. Hypermasculinity remains a significantly under-researched area, as reflected in the limited number of measures, and the absence of papers validating them. More emphasis needs to be placed on building the infrastructure of the concept, in order to ensure that future psychometric test revisions are robust enough to withstand scrutiny.

CHAPTER 5: DISCUSSION

Broadly, this thesis aimed to increase our understanding of the prison officer population and to gain an insight into the undercurrents at play within the prison culture. More specifically, it sought to identify the factors associated with the development of stress and burnout, and to explore barriers to help-seeking in prison officers with a clinical need indicated. This topic was chosen because, to date, the literature in this area has focused almost exclusively on the prisoner population as a means to gain insights into the prison ecosystem. However, prison officers play a crucial role in shaping the prison climate, and understanding their experiences can ensure that policies, support services, and the approach to their recruitment are reviewed and improved to target specific needs of this profession.

The first aim of this thesis was to explore the literature identifying individual and organisational factors that contribute to or cause the development of occupational stress and burnout. There have been two previous literature reviews conducted on this topic (Finney et al., 2013; Schaufeli & Peeters, 2000); however, a more up-to-date scope of the literature was deemed necessary, given that a large body of research on this topic had been published since the last review. Furthermore, both previous reviews had exclusively investigated the role of organisational stressors, with individual factors being largely neglected, despite existing research examining this relationship. It should be noted that the studies included in the review used a broad range of empirically tested instruments to measure occupational stress and burnout. Whilst incorporating this within the inclusion criteria has improved the quality of the systematic reviews in this area, it is likely that these tools vary in terms of quality and utility. Consequently, this should be highlighted as a possible limitation of the systematic literature review, as we cannot be certain that the same concepts are measured. This should

be taken into consideration in future reviews.

High quality studies most widely cited and empirically supported organisational factors in contributing to the development of stress and burnout. These included: high job effort, high workload**,** increased perception of dangerousness**,** low input into decision-making**,** limited role clarity / high role ambiguity**,** low supervisory support and supervision quality**,** limited formalisation, low levels of autonomy and low reward. Although the review evidenced inconsistent findings for many of the factors outlined, the papers presenting non-significant results were low in methodological quality; therefore, were given less weight. The individual factors identified as playing a role in the stress and burnout trajectory were age and length in service. Extraversion and neuroticism also evidenced a relationship with the development of burnout symptoms; however, only one study examined personality factors, making it difficult to draw any firm conclusions.

The systematic literature review examined papers from nine different countries. Synthesising and appraising a body of literature from across the world can have its opportunities and challenges. Whilst exploring all existing research in this field broadened the scope of the investigation and enabled an aerial perspective on the factors contributing to stress and burnout, it does not account for the differences in how prisons operate across the globe. As such, the findings from the literature synthesis are not specific enough to inform policy and practice for a precise geographical region. Similarly, given the research reviewed was mainly conducted in western countries, the results cannot be generalised to prisons worldwide. Future researchers with the primary objective of using predictors of stress and burnout to shape systemic level strategies should consider conducting a country-specific research synthesis.

The current review deduced that only three factors evidenced a relationship with stress and burnout; namely, poor communication, low quality supervisory support, and a lack of job autonomy. To communicate effectively, the fostering of support from the top-down and job autonomy are all harnessed by trust and effective working relationships (Arnold et al., 2012). Without these critical factors, prison personnel are likely to feel undervalued and perceive themselves as a mere cog in the machine of the prison system, where they have limited control over their work. The first stage to addressing these factors is assessing the workplace climate within each prison through a service evaluation and identifying whether they are currently active hazards. This is considered important, as each prison is likely to vary in terms of their achievement of these factors; for example, one prison may demonstrate excellent communication and supervisory support but low job autonomy, whilst another may excel in offering their staff autonomy in their role but may not be offering excellent support from management. Following this, prisons can gain oversight on specific areas that requiring targeting and can implement strategies to address relevant areas and improve the quality of the workplace.

Chapter three presented an empirical research study investigating prison officers' willingness to seek wellbeing support services and the extent to which hypermasculinity and social climate acts as a barrier to help-seeking. With the exception of one qualitative research paper (Wills et al., 2021), this research topic remained unexplored until the present study. As such, this research adopted a quantitative approach, collecting data measuring hypermasculinity, social climate, anxiety, depression and help-seeking behaviours and attitudes. Positively, the study recruited a large sample size, which reduced the margins for error and increased the reliability, precision and power. This also allows the findings to be

153

extrapolated to the wider prison officer population. Qualitative responses were also gathered to provide a richer interpretation of the data.

To our knowledge, this is one of the first research studies of its kind to recognise hypermasculinity as a trait that is not bound by gender. Although the essence of hypermasculinity is to maintain rigid gender boundaries to define what a 'real man' is, the broader definitions outlined in the literature make reference to characteristics such as danger as exciting (Mosher & Sirkin, 1984), dominance and aggression and devaluation of emotions (Burk et al., 2004), that can all be portrayed by individuals of different gender expressions and identities. Whilst the results from the empirical research study would appear to support this supposition, with findings showing no gender differences in levels of hypermasculinity between males and females, caution should be exercised when drawing conclusions from this, due to the limitations of the hypermasculinity tool used (which is addressed later in the discussion).

Results showing that the vast majority (77%) of the prison officer sample fell within the clinical range for anxiety and/or depression. Whilst it may be considered a limitation that the sampling strategy increased the risk of sampling bias and the over-inflation of the pervasiveness of mental health difficulties within this population, the research captured a large sub-group of prison officers that need to be better understood and targeted. Therefore, this is seen as a benefit to the research, as it generated a large sub-sample of participants who fell within the clinical range, facilitating an in-depth exploration of the barriers to help-seeking. The findings also generated some interesting results regarding gender differences, that misaligns with the general population; results showed that men were more likely to fall within the clinical range for depression compared to women. Whilst there are a multitude of

154

biological, psychological and sociological factors that contribute to the onset of depression, the literature highlights experience of work stress as one of them (Dragano et al. 2008; Godin et al. 2005). As such, it is possible that males and females may have different day-to-day experiences of operating in this environment, with females more likely to help-seek in comparison to their male counterparts.

Finally, the relationship between hypermasculinity and help-seeking was explored. The results showed that for prison officers falling within the clinical range, hypermasculinity scores were significantly higher for individuals not accessing support services compared to those who displayed help-seeking behaviours. Furthermore, hypermasculinity was the only factor that was associated with help-seeking. This is an important finding, as it spotlights the relationship between hypermasculine traits and the potential restriction of access to resources, as well as dissuading prison officers from engaging with wellbeing support services. This should also be used to spearhead changes to the prison system that can support in the dissolving of damaging beliefs about what it means to access support, and to change the narrative that psychological difficulties indicate weakness and incompetence.

The results of the current study are also underpinned by other research in the occupational psychology literature, providing further insights into why participants were reluctant to seek support for psychological difficulties. This hesitation may be due to stigma surrounding admitting to needing wellbeing support (Wills et al., 2021), as well as fears about confidentiality and the potential consequences of disclosing personal information to managers or colleagues (Pinar et al., 2018). These findings were consistent with previous research on the topic (Stenseth et al., 2021; Fila & Smith, 2020; Gadd & Corcoran, 2015), which has also highlighted the reluctance of prison officers to seek support, often due to fears

of being perceived as incompetent or weak. Such factors risk the creation of a culture of silence around mental health and well-being issues among prison officers, ultimately leading to a lack of support and access to services for those who need them most.

The collection of written answers exploring the barriers to help-seeking complimented the findings of the quantitative analysis. The key barriers to accessing wellbeing support were understood in terms of the frequency of responses. Six overarching themes arose, namely: trust and confidentiality, stigma, accessibility, feeling uncared for, macho prison culture and perceived effectiveness. Lack of trust and confidentiality were the most frequently cited barriers, with a large number of prison officers expressing fears that their engagement, as well as personal details of their difficulties, would be disclosed to their colleagues. Wills et al.'s (2021) also cited this as a salient finding. Trust has been coined the cornerstone of a positive prison environment, and without it, it is not surprising that prison officers do not feel able to disclose deeply personal experiences of mental health issues and distress (Liebling & Arnold, 2012). A lack of trust can also create fractious relationships and perpetuates a hostile work atmosphere (Bickers et al., 2019). For managers and wellbeing support staff, building and maintaining trust is an important puzzle piece in the development of an emotionally and psychologically safe prison environment. It is recommended that HMPPS review their current approach to confidentiality breaches, and if necessary, to take a more active, 'zero tolerance' approach, with the enforcement of significant consequences for any incidences of violated trust. Doing so would set a precedent and over time, make headway in re-establishing where the 'goal posts' lie. Having a more robust safety net in place for officers who experience an infringement of this kind is critical to improving the reputation of the support services offered and the integrity of the prison system.

A limitation in the current study was that the written responses were not analysed using a formal qualitative methodology. Whilst this was considered a supplementary component to the quantitative element, the absence of a structured analysis limited the insights gained into the unique world of prison officers. Qualitative data analysis has the advantages of being able to develop a more in-depth understanding of complex issues, capturing the evolving perspectives over the course of a conversation (Choy, 2014). It also allows for a more rigorous research process in comparison to the current study. Therefore, it is recommended that future qualitative research conducted in this area should adopt an interpretive phenomenological analytical (IPA) approach, as this methodology would enable for in-depth exploration of the experience of prison officers and their perception of hypermasculinity on a micro and macro level. Nevertheless, obtaining the free-text responses in the current study still offered rich information that complimented the statistical analysis, providing prison officers with a voice to dig below the surface of a questionnaire and to share personal experiences. It may even be the case that participants felt more comfortable offering their honest opinion through this method, as they could remain fully anonymity in the process.

A top-down approach is imperative to normalising conversations around mental health and accessing wellbeing support, as it requires the development of psychological safety within the workplace (Edmondson, 2018). This involves curating a social climate that fosters consistent understanding and support (Edmondson & Lei, 2014); which has the power to provide prison officers with a sense of emotional safety and acceptance. By all means, due to the entrenched nature of the macho culture, these shifts cannot be executed overnight However, strategies should aim to find the balance between healthy disruption of the status quo, and the drip-feeding of a new, more helpful, perspective on wellbeing and support

services.

Chapter four presented a critique of the psychometric properties of the Hypermasculinity Inventory (Mosher & Sirkin, 1984), a tool used in the empirical research study presented in this thesis. At first glance, the Hypermasculinity Inventory appears to be an effective tool, evidencing excellent internal reliability, concurrent validity, face validity and correlating highly with other tests measuring similar components. However, on further analysis, the year of its construction is a significant concern (1983), and as outlined earlier, with advances made in society's perspective on masculine gender expression, it is possible that the tool holds an outdated definition of the phenomenon, no longer providing an accurate representation of the presence or absence of hypermasculine attitudes. The Auburn Differential Masculinity Inventory 60 has built on the work of Mosher and Sirkin (1984), resolving some of the methodological problems, such as the forced-choice statement pairs, as well as expanding on the hypermasculine personality dimensions. However, the authors emphasised concerns about the overlapping of subscales and recommended that future research should establish test-retest reliability, which to our knowledge, due to the scarcity of the literature, has not yet been undertaken. This should be a priority for future research in this field, and researchers considering use of either of these measures should carefully weigh up the limitations of both before selecting one for use.

This thesis has highlighted hypermasculine values and lack of trust as key areas of concern within the prison system. However, the research base is in its infancy, and the methodological approach adopted in the empirical research study leaves areas for further exploration. Future quantitative and qualitative exploration is imperative to supporting the results from the present study and building up a picture of the needs of prison officers. The

priority should be to capture the voice of prison officers through qualitative analysis, and to explore their lived experiences of hypermasculinity within the prison environments and how this may impact on their willingness to access support. This would also enable exploration of other salient factors relevant to help-seeking.

This thesis has furthered our understanding of the prison officer population, emphasising the importance of maintaining momentum of change, to enable the steady development of a healthier prison officer population. It is essential that HMPPS are realistic about the speed with which a culture shift can be achieved, and the associated positive outcomes, such as a reduction in stress-related absenteeism and lower staff turnover rates. Hypermasculine values appear to be entrenched within the prison walls and has been for many years; and the process of eradicating them is not a simple one, requiring a multidimensional approach.

Although the prison has a directory of wellbeing services, including PAM Assist counselling, TRiM trauma support, reflective practice, wellbeing health promotions and a workplace wellbeing platform, it is important that consideration continues to be given to ensure those in need of psychological support to 'buy in'. Pushing prison officers into a counselling session is unlikely to have the desired effect and risks aggravating the problem. However, forums such as reflective practice can be an invaluable space to increase self-awareness (a key component of emotional intelligence), develop a better understanding of others, and facilitate conversations that may provide opportunities to challenge and breakdown stigma (Wagner, 2006). Reflection is a powerful tool and will challenge prison officers to continually improve the way they work and the quality of their relationships with colleagues. Therefore, it is recommended that attendance at a monthly reflective practice

session is a mandatory expectation within the prison officer role. This is likely to reap other benefits too, including allowing people to feel less alone in their experiences, and potentially operating as a springboard to accessing other necessary interventions. It is recommended that these sessions are facilitated by an external psychologist, to ensure that the space is used appropriately and to avoid the time being used to discuss day-to-day procedural aspects.

Improving knowledge of and accessibility to psychological support services should be prioritised on the agenda for HMPPS policies and processes. This could be operationalised through the publicisation of available support services, and reviews of the current methods of advertisement. Ensuring prison officers are aware of the resources available to them is the first step to accessing them. It is recommended that where possible, the support staff running these services make attempts to embed themselves more into spaces frequently occupied by prison officers, as a relationship builder and to promote the service. Furthermore, it is recommended that high quality posters and leaflets are to be placed around the prison (if not done so already), as it can be an effective, passive advertising source, increasing the visibility of support services offered. As part of this, prisons should also review their introduction packs for newly appointed officers to ensure these resources are integrated.

A final recommendation highlighted from the empirical research study is the review of the existing recruitment strategy, to ensure that the enrollment of new officers is fair and unbiased. Although this thesis cannot make conclusions about the extent to which hypermasculinity is imported or built, examining the current recruitment process will protect against individuals already possessing hypermasculine attitudes and behaviours securing roles within prisons, which risks preserving the toxic macho culture. This could involve reviewing the 'essential' and 'desirable' criteria, as well as the process for screening and

160

shortlisting applications, to minimise this risk. Lastly, HMPPS could also consider reviewing the 'prison officer' job title and replacing it with something that more accurately reflect the rehabilitative nature of the role (for example, 'prisoner support officer'). It is anticipated that this would increase the likelihood that the values held within the candidate pool align with that of the prison service (purpose, humanity, openness and together). It is positive that HMPPS have already recognised the need to create a shift in job titles, through the roll out of the key worker scheme, which spotlights support and compassion as integral skills in managing the prisoner population. However, this occurs for existing prison officers; therefore, it is unlikely to have any impact on the type of person attracted to the role. The current proposal is likely to complement the existing strategy, in reducing the extent to which hypermasculinity is imported, whilst also tackling the existing culture.

Eliminating or changing an entrenched hypermasculine culture is not a quick fix; however, with a hybrid approach of changes at an individual and organisational level, we can hope that prison officers begin to move past the archaic hypermasculine patterns of thinking, and redefine what it means to be an effective and competent prison officer.

References

Aarons, G. A., Fettes, D. L., Flores Jr, L. E., & Sommerfeld, D. H. (2009). Evidence-based practice implementation and staff emotional exhaustion in children's services. *Behaviour research and therapy*, *47*(11), 954-960.

Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American psychologist*, *58*(1), 5-18.

Aguirre-Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC psychiatry*, *20*(1), 1-22.

Ahmad, S., & Roslan, N. F. (2016). Relationship between job stress and organizational commitment among public servants in Pontian, Johor. *International Journal of Business*, *Economics and Law*, 10(2), 1-6.

Akbari, J., Akbari, R., Shakerian, M., & Mahaki, B. (2017). Job demand-control and job stress at work: A cross-sectional study among prison staff. *Journal of Education and Health Promotion*. https://doi.org/10.4103/jehp.jehp_68_14

Albert, P. R. (2015). Why is depression more prevalent in women? Journal of psychiatry & neuroscience: JPN, 40(4), 219.

Allen, M. (2017). *The SAGE encyclopedia of communication research methods.* Sage Publications.

Angerer, J. M. (2003). Job burnout. *Journal of employment counseling*, *40*(3), 98-107.

Arciniega, G. M., Anderson, T. C., Tovar-Blank, Z. G., & Tracey, T. J. (2008). Toward a fuller conception of Machismo: Development of a traditional Machismo and Caballerismo Scale. *Journal of counseling psychology*, *55*(1), 19.

Armstrong, G. S., Atkin-Plunk, C. A., & Wells, J. (2015). The Relationship Between Work Family Conflict, Correctional Officer Job Stress, and Job Satisfaction. *Criminal Justice and Behavior*. https://doi.org/10.1177/0093854815582221

Arnold, H., Liebling, A., & Tait, S. (2012). *Prison officers and prison culture.* In Handbook

Atkinson, C. (2016) 'Patriarchy, gender, infantilisation: A cultural account of police intelligence work in Scotland'. *Australian & New Zealand Journal of Criminology*,

1(2), 1−18.

Azad, E., & Gholami, M. (2011). Reliability and validity assessment for the HSE job stress questionnaire. *Journal of Behavioural Science*. 4(14), 291−297.

Babatunde, A. (2013). Occupational stress: A review on conceptualisations, causes and cure. *Economic Insights-Trends & Challenges*, 65 (3), 73-80.

Bailey, J. M., Bechtold, K. T., & Berenbaum, S. A. (2002). Who are tomboys and why should we study them? *Archives of Sexual Behavior*, 31(4), 333 341. doi:10.1023/A:1016272209463

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.

Bakker, A. B., & de Vries, J. D. (2021). Job Demands Resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety*, *Stress*, *& Coping*, 34(1), 1-21.

Baranyi, G., Cassidy, M., Fazel, S., Priebe, S., & Mundt, A. P. (2018). Prevalence of posttraumatic stress disorder in prisoners. *Epidemiologic reviews*, 40(1), 134-145.

Bartram, D. (2007). Increasing validity with forced-choice criterion measurement formats. *International Journal of Selection and Assessment*, *15*(3), 263-272.

Ben-Zeev, A., Scharnetzki, L., Chan, L. K., & Dennehy, T. C. (2012). Hypermasculinity in the media: When men "walk into the fog" to avoid affective communication. *Psychology of Popular Media Culture*, 1(1), 53-58.

Bhui, K., Dinos, S., Galant-Miecznikowska, M., de Jongh, B., & Stansfeld, S. (2016). Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study. *BJPsych bulletin*, 40(6), 318-325.

Bickers, I., Crewe, B., & Mitchell, R. J. (2019). Offender supervision, prisoners and procedural justice. *The Howard Journal of Crime and Justice*, *58*(4), 477-495.

Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: an updated literature review. *Journal of psychosomatic research*, *52*(2), 69-77.

Bloom, S. L., & Farragher, B. (2013). *Restoring sanctuary: A new operating system for trauma-informed systems of care*. Oxford University Press.

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in public health*, *6*, 149.

Boland, A., Cherry, G., & Dickson, R. (Eds.). (2017). *Doing a systematic review: A student's guide*. SAGE Publications ltd.

Borrill, J., Cassidy, T., Teers, R., & Wright, L. (2006). The mental health consequences of dealing with self-inflicted death in custody. *Counselling Psychology Quarterly*, 19(2), 165-180. doi: 10.1080/09515070600811824

Boudoukha, A. H., Altintas, E., Rusinek, S., Fantini-Hauwel, C., & Hautekeete, M. (2013). Inmates-to-staff assaults, PTSD and burnout: Profiles of risk and vulnerability. *Journal of interpersonal violence*, 28(11), 2332-2350.

Bourbonnais, R., Jauvin, N., Dussault, J., & Vézina, M. (2007). Psychosocial work environment, interpersonal violence at work and mental health among correctional officers. *International Journal of Law and Psychiatry*. https://doi.org/10.1016/j.ijlp.2007.06.008

Braverman, M. T., (2013) Negotiating Measurement: Methodological and interpersonal considerations in the choice and interpretation of instruments. *American Journal of Evaluation*, 34, 99–114.

Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.

Bretherton, S. J. (2022). The Influence of Social Support, Help-Seeking Attitudes and Help-Seeking Intentions on Older Australians ʹuse of Mental Health Services for Depression and Anxiety Symptoms. *The International Journal of Aging and Human Development*, 95(3), 308-325.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist*, 32(7), 513.

Brown, T. C., Baldwin, J. M., Dierenfeldt, R., & McCain, S. (2020). Playing the game: A qualitative exploration of the female experience in a hypermasculine policing environment. *Police Quarterly*, 23(2), 143-173.

Burk, L. R., Burkhart, B. R., & Sikorski, J. F. (2004). Construction and Preliminary Validation of the Auburn Differential Masculinity Inventory. *Psychology of Men & Masculinity*, 5(1), 4-13.

Burrus, J., Naemi, B., & Kyllonen, P. C. (2011). Intentional and unintentional faking in education. *New perspective on faking in personality assessment*, 282-306.

Carlson, J. R., Anson, R. H., & Thomas, G. (2003). Correctional Officer Burnout and Stress: Does Gender Matter? *The Prison Journal*. https://doi.org/10.1177/0032885503256327

Carter, K. (2018). *Masculinity in prison. In Gender and Qualitative Research* (pp. 6-21). Routledge.

Cattell, R. B., & Kline, P. E. (1977). *The scientific analysis of personality and motivation.* Academic Press.

Centre for Reviews and Dissemination (CRD). (2009). Systematic reviews: CRD's guidance for undertaking reviews in healthcare.

Chen, J., & Zhou, H. (2017). Test designs and modeling under the general nominal diagnosis model framework. *PloS one*, *12*(6), 1-8.

Cheung, M. W. L., & Chan, W. (2002). Reducing uniform response bias with ipsative measurement in multiple-group confirmatory factor analysis. *Structural Equation Modeling*, 9(1), 55-77.

Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR journal of humanities and social science*, *19*(4), 99-104.

Claire, C. A., & Alderson, K. G. (2013). Living outside the gender binary: A phenomenological exploration into the lived experience of female masculinity. *Canadian Journal of Counselling and Psychotherapy*, 47(1).

Cleary, A. (2005). Death rather than disclosure: Struggling to be a real man. *Irish Journal of Sociology*, 14(2), 155-176.

Clements, A. J., & Kinman, G. (2021). Job demands, organizational justice, and emotional exhaustion in prison officers. *Criminal Justice Studies*, *34*(4), 441-458.

Coen, S. E., Oliffe, J. L., Johnson, J. L., & Kelly, M. T. (2013). Looking for Mr. PG: Masculinities and men's depression in a northern resource-based Canadian community. *Health & Place*, 21(1), 94-101.

Cohen, J. (1988). The effect Size. *Statistical power analysis for the behavioral sciences*, 1(1) 77-83.

Collins, M. M. (2014). Coworker Discretionary Support: Developing and Exploring a Construct. (Masters Dissertation).

Connell, R., (1995). *Masculinities*. Polity Press.

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & society*, *19*(6), 829-859.

Connelly, L. M. (2011). Cronbach's alpha. *Med nursing*, 20(1), 45-47.

Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology*. https://doi.org/10.1111/j.2044-8325.1976.tb00325.x

Cornally, N., & McCarthy, G. (2011). Help-seeking behaviour: A concept analysis. *International journal of nursing practice*, *17*(3), 280-288.

Corprew, C. S., Matthews, J. S., & Mitchell, A. D. (2014). Men at the crossroads: A profile analysis of hypermasculinity in emerging adulthood. *The Journal of Men's Studies*, 22(2), 105-121.

Cox, C. B., Warren, A. R., & Najmabadi, S. J. (2020). Understanding the role of correctional officer attitudes, beliefs, and perceptions in effective correctional programming. *Journal of Offender Rehabilitation*, 59(6), 404-422.

Crank, J. P., Regoli, R., Hewitt, J. D., & Culbertson, R. G. (1995). Institutional and organizational antecedents of role stress, work alienation, and anomie among police executives. *Criminal Justice and Behavior*, *22*(2), 152-171.

Crawley, E. M. (2004). Emotion and performance: Prison officers and the presentation of self in prisons. *Punishment & society*, *6*(4), 411-427.

Crewe, B., Warr, J., Bennett, P., & Smith, A. (2014). The emotional geography of prison life. *Theoretical criminology*, 18(1), 56-74.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrica*, 16(3), 297-334.

Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied psychology*, *88*(1), 160.

Croux, C. & Haesbroeck, G. (2000). Principal component analysis based on robust estimates of the covariance and correlation matrix: influence functions and efficiencies. *Biometrika*, 72(1), 603-18.

Cullen, F. T., Link, B. G., Wolfe, N. T., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly*. 2(4), 505-553. https://doi.org/10.1080/07418828500088711

Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: a theoretical model. *Archives of general psychiatry*, 57(1), 21-27.

Day, A., Casey, S., Vess, J., & Huisy, G. (2011). Assessing the social climate of Australian prisons. *Trends and Issues in Crime and Criminal Justice*, (427), 1-6.

De Viggiani, N. (2003). Unhealthy prison masculinities: Theorising men's health in prison. (Doctoral dissertation).

Décieux, P. J., Mergener, A., Neufang, M. K., & Sischka, P. (2015). Implementation of the forced answering option within online surveys: Do higher item response rates come at the expense of participation and answer quality?. *Psihologija*, *48*(4), 311-326.

Denhof, M., Morton, G., & Spinaris, C.(2013). Impact of traumatic exposure on corrections Professionals. *Desert Waters Correctional Outreach*, 1(1), 1-72.

DeVellis, R. F. (1991). *Scale development: Theory and applications*. Sage Publication.

Dillman, D . A., Smyth, J. D., & Christian, L. M. (2014). I*nternet, phone, mail, and mixed mode surveys: the tailored design method*, *4th edition*. John Wiley & Sons.

Dowler, K. (2005). Job Satisfaction, Burnout, and Perception of Unfair Treatment: The Relationship Between Race and Police Work. *Police Quarterly*. https://doi.org/10.1177/1098611104269787

Dowler, K. (2007). Introduction to the special issue: Media criminology in the television world. *Journal of Criminal Justice and Popular Culture*, *14*(3), 237-242.

Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (AXIS). *BMJ Open*. https://doi.org/10.1136/bmjopen-2016-011458

Dragano, N., He, Y., Moebus, S., Jöckel, K. H., Erbel, R., & Siegrist, J. (2008). Two models of job stress and depressive symptoms. *Social psychiatry and psychiatric epidemiology*, *43*(1), 72-78.

Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth.* John Wiley & Sons.

Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual review of organizational psychology and organizational behavior*, *1*(1), 23-43.

Edwards, D., Burnard, P., Coyle, D., Fothergill, A., & Hannigan, B. (2000). Stressors, moderators and stress outcomes: Findings from the All-Wales Community Mental Health Nurse Study. *Journal of Psychiatric and Mental Health Nursing*. https://doi.org/10.1046/j.1365-2850.2000.00359.x

Ellis, D. (1979). The prison guard as carceral Luddite: a critical review of the MacGuigan Report on the penitentiary system in Canada. Canadian Journal of Sociology/Cahiers canadiens de sociologie, 43-64.

Esch, T., Stefano, G. B., Fricchione, G. L., & Benson, H. (2002). The role of stress in neurodegenerative diseases and mental disorders. *Neuroendocrinology letters*, *23*(3), 199-208.

Evers, T. J., Ogloff, J. R., Trounson, J. S., & Pfeifer, J. E. (2020). Well-being interventions for correctional officers in a prison setting: A review and meta-analysis. *Criminal Justice and Behavior*, *47*(1), 3-21.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39(2), 175-191.

Feldman, M. J., & Corah, N. L. (1960). Social desirability and the forced choice method. *Journal of Consulting Psychology*, *24*(6), 480.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Figley, C. (1996). Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those Who Treat the Traumatized. *Social Work*, 42(2), 207-207. https://doi.org/10.1093/sw/42.2.207-a

Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: a systematic review. In *BMC public health*. https://doi.org/10.1186/1471-2458-13-82

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of consumer research*, 20(2), 303-315.

Franzén, A. G. (2021). '*Hypermasculinity 'in Interaction: Affective Practices, Resistance and Vulnerability in a Swedish Youth Prison. In The Palgrave International Handbook of Youth Imprisonment* (pp. 333-354). Palgrave Macmillan, Cham.

Fusco, N., Ricciardelli, R., Jamshidi, L., Carleton, R. N., Barnim, N., Hilton, Z., & Groll, D. (2021). When our work hits home: Trauma and mental disorders in correctional officers and other correctional workers. *Frontiers in psychiatry*, 1040.

Gagnon, J. C., & Barber, B. R. (2018). Concurrent validity: *In The SAGE encyclopedia of educational research, measurement and evaluation*. Sage.

Garland, B., Hogan, N. L., & Lambert, E. G. (2013). Antecedents of role stress among correctional staff: A replication and expansion. *Criminal Justice Policy Review*, *24*(5), 527-550.

Gaston-Hawkins, L. A., Solorio, F. A., Chao, G. F., & Green, C. R. (2020). The silent epidemic: causes and consequences of medical learner burnout. *Current Psychiatry Reports*, 22(12), 1-9.

Gillin, J. (1955). Ethos components in modern Latin American culture. *American Anthropologist*, *57*(3), 488-500.

Godin, G., Conner, M., & Sheeran, P. (2005). Bridging the intention behaviour gap: The role of moral norm. *British journal of social psychology*, *44*(4), 497-512.

Good, G. E., & Wood, P. K. (1995). Male gender role conflict, depression, and help seeking: Do college men face double jeopardy? *Journal of Counseling and Development*, 74(1), 70-75.

Griffin, M. L., Hogan, N. L., & Lambert, E. G. (2012). Doing "People Work" in the Prison Setting: An Examination of the Job Characteristics Model and Correctional Staff Burnout. *Criminal Justice and Behavior*. https://doi.org/10.1177/0093854812442358

Gripp, C., & Zaluar, A. (2017). Police and gendered labor performances: hypermasculinity and policing as a masculine function. *Vibrant: Virtual Brazilian Anthropology*, 14(2). doi: 10.1590/1809-

Groth-Marnat, G., & Baker, S. (2003). Digit span as a measure of everyday attention: a study of ecological validity. *Perceptual and motor skills*, 97(3)1209-1218.

Hamburger, M. E, Hogben, M., McGowan, S., & Dawson, L. J. (1996). Assessing hypergender ideologies: Development and initial validation of a gender-neutral measure of adherence to extreme gender role beliefs. *Journal of Research in Personality*, 30, 157–178.

Hammer, J. H., Parent, M. C., & Spiker, D. A. (2018). Mental Help Seeking Attitudes Scale (MHSAS): Development, reliability, validity, and comparison with the ATSPPH-SF and IASMHS-PO. *Journal of Counseling Psychology*, *65*(1), 74.

Haney, C. (2011). The perversions of prison: On the origins of hypermasculinity and sexual violence in confinement. *American Criminal Law Review*, 48(1), 121.

Harizanova, S., Stoyanova, R., & Mateva, N. (2018). Do personality characteristics constitute the profile of burnout-prone correctional officers? *Open Access Macedonian Journal of Medical Sciences*. https://doi.org/10.3889/oamjms.2018.328

Harris, B. (2021). Toxic Masculinity: An Exploration of Traditional Masculine Norms in Relation to Mental Health Outcomes and Help-Seeking Behaviors in College-Aged Males 1(1), 1-12.

Harty, J., & Vermillion, M. (2018). Correctional officers' beliefs, attitudes, and perceptions of inmate characteristics: *A systematic review of the literature. Criminal Justice Review*, 43(3), 294-308.

Harvey, J. (2014). Perceived Physical Health, Psychological Distress, and Social Support Among Prison Officers. *The Prison Journal*. https://doi.org/10.1177/0032885514524883

Haynes, S. H., Leone, M. C., Keena, L. D., May, D. C., Ricciardelli, R., & Lambert, E. G. (2020). The association between different forms of organizational trust and correctional staff job stress. *Journal of Crime and Justice*, 43(5), 623-639.

Health and Safety Executive. (2004). *Psychosocial working conditions in Great Britain in 2004*. Retrieved June 10, 2022, from http://www.hse.gov.uk/statistics/causdis/pwc2004.pdf

Health and safety Executive. (2020). Work-related stress, anxiety or depression statistics in Great Britain. *Health and Safety Executive*, *1*(1), 1–9.

Helmes, E., & Holden, R. R. (2003). The construct of social desirability: one or two dimensions?. *Personality and Individual Differences*, *34*(6), 1015-1023.

Her Majesty's Prison and Probation Service. (2019). HMPPS workforce statistics bulletin: March 2019. *Crime, Justice and law*, 1-16.

Her Majesty's Prison and Probation Service. (2020). HMPPS workforce statistics bulletin: March 2020. *Crime, Justice and law*, 1-16.

Higgins, G. E., Tewksbury, R., & Denney, A. S. (2013). Validating a Measure of Work Stress for Correctional Staff: A Structural Equation Modeling Approach. *Criminal Justice Policy Review*. https://doi.org/10.1177/0887403411434929

HM Prison and Probation. (2020). *Practitioner Guide Working with people in the Criminal Justice System showing Personality Difficulties*. *3*(February), 116.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524. doi: 10.1037/0003-066x.44.3.513

Hochschild, A. (1983). Comment on Kemper's" Social Constructionist and Positivist Approaches to the Sociology of Emotions". *American Journal of Sociology*, 89(2), 432-434.

Holden, R. R. (2010). Face validity. *The corsini encyclopedia of psychology*, 1(1), 1-2.

House of Commons, (2020). *Coronavirus (Covid-19): The impact on prisons*. Retrieved from: https://committees.parliament.uk/publications/2154/documents/20016/default/ (Accessed 17th May 2021).

House of Commons. (2017). Mental Health in Prisons. The Stationary Office.

Howard, G.S. (1994). Why do people say nasty things about self-reports? *Journal of Organizational Behavior*, 15, 399-404.

Hu, S., Wang, J. N., Liu, L., Wu, H., Yang, X., Wang, Y., & Wang, L. (2015). The association between work-related characteristic and job burnout among Chinese correctional officers: A cross-sectional survey. *Public Health*. https://doi.org/10.1016/j.puhe.2015.05.006

Hua-Fu, H. (2005). The patterns of masculinity in prison. *Critical Criminology*, 13(1), 1-16.

Hui, A. K., Wong, P. W., & Fu, K. W. (2014). Building a model for encouraging help-seeking for depression: a qualitative study in a Chinese society. *BMC Psychology*, *2*(1), 1-12.

Hurrell Jr, J., & Sauter, S. L. (2017). Occupational health contributions to the development and promise of occupational health psychology. *Journal of Occupational Health Psychology*, 22(3), 251.

Hurrell, J. J. (2011). Work Stress: Health Care Systems in the Workplace. *Academy of Management Executive*. https://doi.org/10.5465/ame.1988.4275615

Iliffe, G., & Steed, L. G. (2000). Exploring the counselor's experience of working with perpetrators and survivors of domestic violence. *Journal of interpersonal violence*, 15(4), 393-412.

Izard, C. E. (1977). Differential emotions theory. In *Human emotions* (pp. 43-66). Springer.

Jackson, D. N. (1974). *Personality research form*. Research Psychologists Press.

Jackson, S. E. (1983). Participation in decision making as a strategy for reducing job-related strain. *Journal of applied Psychology*, 68(1), 3.

Jackson, D. N. (1984). *Personality Research Form manual*, *3rd edition*. Research Psychologists Press.

Jackson, S. E., & Maslach, C. (1982). After-effects of job-related stress: Families as victims. *Journal of organizational behavior*, *3*(1), 63-77.

Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. *Journal of applied psychology*, *71*(4), 630.

Jin, X., Sun, I. Y., Jiang, S., Wang, Y., & Wen, S. (2018). The relationships between job and organizational characteristics and role and job stress among Chinese community

correctional workers. *International Journal of Law, Crime and Justice*.
https://doi.org/10.1016/j.ijlcj.2017.09.002

Johnson, A. G. (2005*). The gender knot: Unraveling our patriarchal legacy*. Temple
University Press.

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The
experience of work-related stress across occupations. *Journal of Managerial
Psychology*. https://doi.org/10.1108/02683940510579803

Karaffa, K. M., & Tochkov, K. (2013). Attitudes toward seeking mental health treatment
among law enforcement officers. *Applied Psychology in Criminal Justice*, 9(2), 1-8.

Karasek, R. A. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications
for Job Redesign. *Administrative Science Quarterly*. https://doi.org/10.2307/2392498

Karp, D. R. (2010). Unlocking men, unmasking masculinities: Doing men's work in prison.
The Journal of Men's Studies, 18(1), 63-83.

Kasper, S. (2006). Anxiety disorders: under-diagnosed and insufficiently treated.
International Journal of Psychiatry in Clinical Practice, 10(1), 3-9.

Keinan, G., & Malach-Pines, A. (2007). Stress and burnout among prison personnel: Sources,
outcomes, and intervention strategies. *Criminal Justice and Behavior*.
https://doi.org/10.1177/0093854806290007

Kemshall, H., & Wood, J. (2019). The impact of working in a prison environment: Staff
perspectives. **The Howard Journal of Crime and Justice,** 58(2), 141-158. doi:
10.1111/hojo.12314

Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue,
burnout, and self-care in clinicians working with trauma
survivors. *Traumatology*, *14*(2), 32-44.

Kilmartin, C.T., (2005). Depression in men: communication, diagnosis and therapy. *Journal
of Men's Health and Gender*, 1(2), 95   99.

King, A., & Oliver, (2021). A qualitative study exploring prison officers 'experiences of
vicarious trauma, (Doctoral dissertation, University of Birmingham).

Kinman, G., Clements, A. J., & Hart, J. (2016). Work-related wellbeing in UK prison
officers: A benchmarking approach. *International Journal of Workplace Health*

Management, 1(10), 2-23.

Kinner, S., & Young, J. (2018). Understanding and Improving the Health of People Who Experience Incarceration: An Overview and Synthesis. *Epidemiologic Reviews*, *40*(1), 4-11. doi: 10.1093/epirev/mxx018

Kline, P. (1986) *A handbook of test construction: Introduction to psychometric design*. London: Methuen.

Kline, P. (2000). *A psychometrics primer*. Free Association Books.

Kline, P. (2013). *Handbook of psychological testing.* Routledge.

Kopplin, D. A., Greenfield, T. K., & Wong, H. Z. (1977). Changing patterns of substance use on campus: A four-year follow-up study. *International Journal of the Addictions*, 12(1), 73-94.

Korczak, D., Huber, B., & Kister C. (2010). Differential diagnostic of the burnout syndrome. *GMS Health Technol Assess*, 5(6)1-8.

Krahé, B., & Fenske, I. (2002). Predicting aggressive driving behavior: The role of macho personality, age, and power of car. *Aggressive Behavior*, 28(1), 21 29.

Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Nieto, M. D., & Morillo, D. (2019). Controlling for response biases in self-report scales: Forced-choice vs. psychometric modeling of Likert items. *Frontiers in psychology*, *10*, 2309.

Kubiak, S., Covington, S., & Hillier, C. (2017). Trauma-informed corrections. *Social work in juvenile and criminal justice system*, 4(7), 92-104.

Kulik, J. A., Stein, K. B., & Sarbin, T. R. (1968). Disclosure of delinquent behavior under conditions of anonymity and non-anonymity. *Journal of Consulting and Clinical Psychology*, 32(5), 506.

Kupers, T. (2001). *Psychotherapy with men in prison. In G. Brooks & G. Good (Eds.), A new handbook of counseling and psychotherapy approaches for men*. Jossey-Bass.

Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of clinical psychology*, 61(6), 713-724.

Kupers, T. A. (2010). Role of misogyny and homophobia in prison sexual abuse. *UCLA Women's Law Journal*, 18(1), 3-25.

Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: the cornerstone of modern statistics. *Korean journal of anesthesiology*, 70(2), 144.

Lambert, E. G., & Paoline, E. A. (2005). The impact of medical issues on the job stress and job satisfaction of jail staff. *Punishment and Society*. https://doi.org/10.1177/1462474505053829

Lambert, E. G., Barton-Bellessa, S. M., & Hogan, N. L. (2015). The Consequences of Emotional Burnout Among Correctional Staff. *SAGE Open*. https://doi.org/10.1177/2158244015590444

Lambert, E. G., Hogan, N. L., & Altheimer, I. (2010). An exploratory examination of the consequences of burnout in terms of life satisfaction, turnover intent, and absenteeism among private correctional staff. The Prison Journal, 90(1), 94-114.

Lambert, E. G., Hogan, N. L., & Cluse-Tolar, T. (2007). This job is killing me: The impact of job characteristics on correctional staff job stress. *Applied Psychology in Criminal Justice*.

Lambert, E. G., Hogan, N. L., & Tucker, K. A. (2009a). Problems at Work: Exploring the Correlates of Role Stress Among Correctional Staff. *The Prison Journal*. https://doi.org/10.1177/0032885509351006

Lambert, E. G., Hogan, N. L., Jiang, S., & Jenkins, M. (2009b). I Am Fried: Stressors and Burnout Among Correctional Staff. *Corrections Compendium*.

Lambert, E. G., Keena, L. D., Haynes, S. H., May, D., & Leone, M. C. (2020). Predictors of Job Stress Among Southern Correctional Staff. *Criminal Justice Policy Review*. https://doi.org/10.1177/0887403419829211

Lambert, E. G., Minor, K. I., Wells, J. B., & Hogan, N. L. (2016). Social support's relationship to correctional staff job stress, job involvement, job satisfaction, and organizational commitment. *Social Science Journal*. https://doi.org/10.1016/j.soscij.2015.10.001

Lambert, E., & Paoline, E. A. (2010). Take this job and shove it: An exploratory study of turnover intent among jail staff. *Journal of Criminal Justice*, 38(2), 139-148.

Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2017). Correlates of correctional staff attitudes towards inmate mental health treatment. *International Journal of Law and Psychiatry*, 55, 80-86. doi: 10.1016/j.ijlp.2017.09.001

Lavrakas, P. J. (2008). *Encyclopedia of survey research methods.* Sage publications.

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of applied Psychology*, *81*(2), 123.

Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of organizational behavior*, *9*(4), 297-308.

Leong, F. T. L., & Zachar, P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking professional psychological help. *British Journal of Guidance and Counseling*, 27(1), 123-132.

Levant, R. F., Smalley, K. B., Aupont, M., House, A. T., Richmond, K., & Noronha, D. (2021). The case for expanding traditional masculinity ideology and its measurement. *Psychology of Men & Masculinities*, 22(1), 141−153. https://doi.org/10.1037/men0000339

Liebling, A., & Arnold, H. (2012). Social relationships between prisoners in a maximum security prison: Violence, faith, and the declining nature of trust. *Journal of Criminal Justice*, *40*(5), 413-424.

Liebling, A., Price, D., & Shefer, G. (2010). *The prison officer*. Routledge.

Lombardo, L. X. (2016). *Routledge revivals: Guards imprisoned (1989): Correctional officers at work*. Routledge.

Losilla, J. M., Oliveras, I., Marin-Garcia, J. A., & Vives, J. (2018). Three risk of bias tools lead to opposite conclusions in observational research synthesis. Journal of clinical epidemiology, 101, 61-72.

Lovell, B., & Brown, R. (2017). Burnout in UK prison officers: the role of personality. *The Prison Journal*, *97*(6), 713-728.

Lu, Y., Hu, X., Huang, X., Wang, X., & Liu, L. (2021). Effects of job demands and job control on burnout among Chinese nurses: A moderated mediation model. *BMC Public Health*, 21(1), 711. doi: 10.1186/s12889-021-10797-2

MacDonald, M. (2018). Overcrowding and its impact on prison conditions and health. *International Journal of Prisoner Health*, 14(2), 65-68. https://doi.org/10.1108/ijph-04-

Mackenzie, C. S., Poulin, P. A., & Seidman-Carlson, R. (2018). A critical examination of the job demands-resources model in the prediction of prison officer well-being and turnover intentions. *International Journal of Offender Therapy and Comparative Criminology*, 62(3), 554-573. doi: 10.1177/0306624X16680573

Magnavita, N., Garbarino, S., & Siegrist, J. (2020). The active work-stress intervention to improve occupational health in health care workers. *European Journal of Public Health*, 30(5), 30-40. doi: 10.1093/eurpub/ckaa165.016

Mahalik, J. R., Good, G. E., & Englar-Carlson, M. (2003). Masculinity scripts, presenting concerns, and help seeking: Implications for practice and training. *Professional Psychology: Research and Practice*, 34(2), 123.

Malach-Pines, A. (2005). The burnout measure, short version. *International Journal of Stress Management*. https://doi.org/10.1037/1072-5245.12.1.78

Maslach, C. (1986). Stress, burnout, and workaholism. In R. R. Kilburg, P. E. Nathan, & R. W. Thoreson (Eds.), *Professionals in distress: Issues, syndromes, and solutions in psychology* (pp. 53–75). American Psychological Association.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*. https://doi.org/10.1002/job.4030020205

Maslach, C., & Jackson, S. E. (1982). Burnout in health professions: A social psychological analysis. *Social psychology of health and illness*, 3(1), *227*-251. doi: 10.1037/t05190-000

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World psychiatry*, 15(2), 103-111.

Maslach, C., & Schaufeli, W. B. (2018). Historical and conceptual development of burnout. In Professional burnout: *Recent developments in theory and research*, (1-16).

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, *52*(1), 397-422.

Matheson, G. J. (2019). We need to talk about reliability: making better use of test-retest studies for study design and interpretation. *Peer Journal*, 7(6) 69-118.

Matz, A. K., Wells, J. B., Minor, K. I., & Angel, E. (2013). Predictors of turnover intention among staff in juvenile correctional facilities: The relevance of job satisfaction and organizational commitment. *Youth Violence and Juvenile Justice*, 11(2), 115-131.

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of traumatic stress*, 3(1), 131-149.

McKelley, R. A., & Rochlen, A. B. (2010). Conformity to masculine norms and preferences for therapy or executive coaching. *Psychology of Men & Masculinity*, 11(1) 1-14.

McKenzie, S. K., Collings, S., Jenkin, G., & River, J. (2018). Masculinity, social connectedness, and mental health: Men's diverse patterns of practice. *American journal of men's health*, *12*(5), 1247-1261.

Michie, L. (2019). Occupational stress and wellbeing among prison staff: A systematic review. *International Journal of Law and Psychiatry*, 65, 101425.

Michielsen, H. J., De Vries, J., Van Heck, G. L., Van de Vijver, F. J., & Sijtsma, K. (2004). Examination of the Dimensionality of Fatigue: The Construction of the Fatigue Assessment Scale (FAS). *European Journal of Psychological Assessment*, *20*(1), 39.

Miller, N. A., & Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. *European journal of psychotraumatology*, 3(1), 17246.

Ministry of Justice, (2013). Her Majesty's Prison and Probation Service (HMPPS) Workforce Statistics Bulletin, 1-8.

Ministry of Justice, (2019a). Her Majesty's Prison and Probation Service (HMPPS) Workforce Statistics Bulletin, 1(1)1-6.

Ministry of Justice, (2019b). Her Majesty's Prison and Probation Service (HMPPS) *Workforce Statistics Bulletin*, 1(1), 1-6.

Ministry of Justice, (2022). Her Majesty's Prison and Probation Service (HMPPS) *Workforce Statistics Bulletin*, 1-16.

Ministry of Justice, 2021. *Safety in Custody Statistics, England and Wales: Deaths in Prison Custody to December 2020 Assaults and Self-harm to September 2020*. Her Majesty's

Prison and Probation Service.

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. Annals of cardiac anaesthesia, 22(1), 67.

Mislevy, R. J. (1986). Recent developments in the factor analysis of categorical variables. *Journal of educational statistics*, *11*(1), 3-31.

Moorey, S., Greer, S., Watson, M., Gorman, C., Rowden, L., Tunmore, R., & Bliss, J. (1991). The factor structure and factor stability of the hospital anxiety and depression scale in patients with cancer. *The British Journal of Psychiatry*, *158*(2), 255-259.

Morse, S. J. (2017). Hypermasculinity and Incarceration: Exploring Barriers to Rehabilitation (Doctoral dissertation, Arizona State University).

Mosher, D. L. (1971). Sex callousness toward women. *Technical reports of the Commission on Obscenity and Pornography*, 8, 313-325.

Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of research in personality*, *18*(2), 150-163.

Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of research in personality*, 18(2), 150-163.

Moss, J. (2021). *The burnout epidemic: The rise of chronic stress and how we can fix it*. Harvard Business Press.

Most, S. B., Chun, M. M., Widders, D. M., & Zald, D. H. (2005). Attentional rubbernecking: Cognitive control and personality in emotion-induced blindness. *Psychonomic bulletin & review*, *12*(4), 654-661.

Munger, K. (2019). Knowledge decays: Temporal validity and social science in a changing world. I*ntelligence*, 39(5), 255-272.

Munger, T., Savage, T., & Panosky, D. M. (2015). When caring for perpetrators becomes a sentence: Recognizing vicarious trauma. *Journal of Correctional Health Care*, 21(4), 365-374.

Murphy, K. R., & Davidshofer, C. O. (1998). *Psychological testing: Principles & applications (4th ed.)*. Prentice-Hall.

Nathans, L. L., Oswald, F. L., & Nimon, K. (2012). Interpreting multiple linear regression: a guidebook of variable importance. *Practical assessment, research & evaluation*, 17(9), 9.

Neilson, E. C., Singh, R. S., Harper, K. L., & Teng, E. J. (2020). Traditional masculinity ideology, posttraumatic stress disorder (PTSD) symptom severity, and treatment in service members and veterans: A systematic review. *Psychology of Men & Masculinities*, 1(1), 1-13.

Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. In *JALT 2013 conference proceedings*, 108(1), 1-6.

Neveu, J. P. (2007). Jailed resources: Conservation of resources theory as applied to burnout among prison guards. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 28(1), 21-42.

NHS Leadership Academy. (2022). Stress and burnout: how to spot the signs. Available at: https://learninghub.leadershipacademy.nhs.uk/executivesuite/support-in-difficult-times/stress-and-burnout/

Nunnally, J. C. (1978). *Psychometric Theory* 2nd edition.

Nyklicek, I., & Pop, V. J. M. (2005). Past and familial depression as predictors of burnout in a working population sample. *Journal of Affective Disorder*s, 88(1), 63-68.

O'connor, P. J. (1990). Normative data: their definition, interpretation, and importance for primary care physicians. *Family medicine*, 22(4), 307-311.

O'neil, J. M. (2015). *Men's gender role conflict: Psychological costs, consequences, and an agenda for change*. American Psychological Association.

Oliffe, J. L., Hanberg, D., Hannan-Leith, M. N., Bergen, C., & Martin, R. E. (2018). "Do You Want to Go Forward or Do You Want to Go Under?" Men′s Mental Health in and Out of Prison. *American journal of men's health*, *12*(5), 1235-1246.

Oliveira, R. V., Schneider, V., Bonafé, F. S. S., Maroco, J., & Campos, J. A. D. B. (2016). Occupational characteristics and burnout syndrome in Brazilian correctional staff. *Work*, *55*(1), 215-223.

Osipow, S., & Spokane, S. (1987). Occupational Stress Inventory. *Psychological Assessment Resources*, *1*(1), 1–10.

Otu, S., Lambert, E. G., & Elechi, O. O. (2018). Testing the Job Demands-Resources Model for Nigerian prison staff job stress. *The Howard Journal of Crime and Justice*, 57(2), 152-181.

Page, J., & Robertson, N. (2021). Extent and predictors of work-related distress in community correction officers: a systematic review. *Psychiatry*, *Psychology and* Law, 1-28.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D, & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, 105906.

Palmer, P.B., & Connell, D.G.O. (2009). Regression analysis for prediction: understanding the process. *Cardiopulmonary Physical Therapy Journal*, 20(3), 23 26.

Paoline, E. A., Lambert, E. G., & Hogan, N. L. (2015). Job Stress and Job Satisfaction Among Jail Staff: Exploring Gendered Effects. *Women and Criminal Justice*. https://doi.org/10.1080/08974454.2014.989302

Paulhus, D. L. (1981). Control of social desirability in personality inventories: Principal-factor deletion. *Journal of Research in Personality*, *15*(3), 383-388.

Paulhus, D. L., & Reid, D. B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, 60, 307-317

Perkins, S. (2015). *Hegemonic masculinity and its effect on attitudes toward seeking professional psychological help*. Northeastern University.

Peters, J., Nason, C., & Turner, W. M. (2007). Development and testing of a new version of the hypermasculinity index. *Social Work Research*, *31*(3), 171-182.

Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. Thousand Oaks, CA: Sage Publications.

Philliber, S. (1987). Thy brother's keeper: A review of the literature on correctional officers. *Justice Quarterly*, *4*(1), 9-37.

Pieper, D., Antoine, S. L., Neugebauer, E. A. M., & Eikermann, M. (2014). Up-to-dateness of reviews is often neglected in overviews: A systematic review. In *Journal of Clinical Epidemiology*. https://doi.org/10.1016/j.jclinepi.2014.08.008

Pinar, R., Usta, E., Alparslan, Z. N., Aydin, N., & Celik, Y. (2018). The barriers to help-seeking behavior of prison officers. *Journal of Forensic Nursing*, 14(1), 19-24.

Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures*. Free press.

Pines, A. M., & Keinan, G. (2005). Stress and burnout: The significant difference. *Personality and individual differences*, 39(3), 625-635.

Pleck, J. H., Sonenstein, F. L., & Ku, L. C. (1993). Masculinity ideology: Its impact on adolescent males' heterosexual relationships. Journal of Social issues, 49(3), 11-29.

Pleck, J. H., Sonenstein, F. L., & Ku, L. C. (1994). Attitudes toward male roles among adolescent males: A discriminant validity analysis. *Sex roles*, *30*(7), 481-501.

Poghosyan, L., Aiken, L. H., & Sloane, D. M. (2009). Factor structure of the Maslach burnout inventory: an analysis of data from large scale cross-sectional surveys of nurses from eight countries. *International journal of nursing studies*, 46(7), 894-902.

Polignano, M. V. (2019). 済無No Title No Title. *Journal of Chemical Information and Modeling*, *53*(9), 1689−1699.

Powell, G. N., Butterfield, D. A., & Jiang, X. (2018). Why Trump and Clinton won and lost: the roles of hypermasculinity and androgyny. *Equality*, *Diversity and Inclusion: An International Journal*, 37(1), 44-62

Razavi, T. (2001). Self-report measures: An overview of concerns and limitations of questionnaire use in occupational stress research. *University of Southampton - Department of Accounting and Management Science*, 1-175.

Reading, L., & Ross, G. E. (2020). Comparing social climate across therapeutically distinct prison wings. *The Journal of Forensic Practice*, 1(1), 3-10.

Regehr, C., Carey, M., Wagner, S., Alden, L. E., Buys, N., Corneil, W., & White, N. (2021). Prevalence of PTSD, depression and anxiety disorders in correctional officers: A systematic review. *Corrections*, 6(3), 229-241.

Richardsen, A. M., & Martinussen, M. (2005). Factorial validity and consistency of the MBI-GS across occupational groups in Norway. *International Journal of Stress*

Management, 12(3), 289.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-journal for the Advancement of Mental health*, *4*(3), 218-251.

Robertson, J. M., & Fitzgerald, L. F. (1992). Overcoming he masculine mystique: Preferences for alternative forms of assistance among men who avoid counseling. *Journal of Counseling Psychology*, *39*, 240-246.

Rupert, P. A., & Morgan, D. J. (2005). Work setting and burnout among professional psychologists. *Professional Psychology: Research and Practice*, *36*(5), 544

Salgado, J. F., & Tauriz, G. (2014). The Five-Factor Model, forced-choice personality inventories and performance: A comprehensive meta-analysis of academic and occupational validity studies. *European Journal of Work and Organizational Psychology*, *23*(1), 3-30.

Salvagioni, D., Melanda, F., Mesas, A., González, A., Gabani, F., & Andrade, S. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *Plos One*, 12(10), 1-16.

Sanchez-Lopez, M., & Limiñana-Gras, R. (2017). Hegemonic Masculinity. *In the psychology of gender and health*. Elsevier.

Santorso, S. (2021). Rehabilitation and dynamic security in the Italian prison: challenges in transforming prison officers'roles. *The British Journal of Criminology*, 61(6), 1557-1574.

Sargent, L. D., & Terry, D. J. (2021). Job demands, job control, and mental health among Australian firefighters: A moderated-mediation model. *Journal of Occupational Health Psychology*, 26(1), 36-49. doi: 10.1037/ocp0000274

Savalei, V., and Falk, C. V. (2014). Recovering substantive factor loadings in the presence of acquiescence bias: a comparison of three approaches. *Multivariate Behaviour Research* 49(1), 407–424.

Savicki, V., Cooley, E., & Gjesvold, J. (2003). Harassment as a Predictor of Job Burnout in Correctional Officers. *Criminal Justice and Behavior*. https://doi.org/10.1177/0093854803254494

Saville, P. & Wilson, E. (1991). The reliability and validity of normative and ipsative approaches in the measurement of personality. *Journal of Occupational Psychology*, 64, 219-238.

Schalast, N., & Laan, J. M. (2017). Measuring social climate in German prisons using the Essen Climate Evaluation Schema. *The Prison Journal*, *97*(2), 166-180.

Schalast, N., & Tonkin, M. (2017). *The Essen Climate Evaluation Schema – EssenCES*. Hogrefe Publishing.

Schalast, N., Redies, M., Collins, M., Stacey, J., & Howells, K. (2008). EssenCES, a short questionnaire for assessing the social climate of forensic psychiatric wards. *Criminal Behaviour and Mental Health*, *18*(1), 49-58.

Schat, A. C. H., & Frone, M. R. (2011). Exposure to psychological aggression at work and job performance: The mediating role of job attitudes and personal health. *Work and Stress*. https://doi.org/10.1080/02678373.2011.563133

Schaufeli, W. B., & Peeters, M. C. (2000). Job stress and burnout among correctional officers: A literature review. *International Journal of stress management*, *7*(1), 19-48.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, *66*(4), 701-716.

Schaufeli, W. B., Bakker, A. B., & van Rhenen, W. (2009a). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*. https://doi.org/10.1002/job.595

Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009b). Burnout: 35 years of research and practice. *Career development international*.

Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). The Maslach Burnout Inventory General Survey. In *Maslach Burnout Inventory*.

Schaufeli, W., Maslach, C., & Marek, T. (2017). *Professional burnout*. Taylor & Francis.

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763-1768.

Schouteten, R. (2016). Predicting absenteeism: screening for work ability or burnout. Occupational Medicine, (8)1, 161.

Seidler, V. J. J. (1997*). Man enough: Embodying masculinities*. Sage.

Setti, I., & Argentero, P. (2015). Il benessere nei vigili del fuoco volontari: la mindfulness come risorsa psicologica. *Il benessere nei vigili del fuoco volontari: la mindfulness come risorsa psicologica*, 101-121.

Seybert, J., & Becker, D. (2019). Examination of the Test Retest Reliability of a Forced-Choice Personality Measure. *ETS Research Report Series*, *2019*(1), 1-17.

Seymour, K. (2003). Imprisoning masculinity. *Sexuality & Culture*, 7(4), 27-55.

Shallcross, N. J., & Ahner, D. K. (2020). Predictive models of world conflict: accounting for regional and conflict-state differences. *The Journal of Defense Modeling and Simulatio*n, 17(3), 243-267.

Sher, L. (2020). Suicide in men: an underappreciated public health challenge. *European archives of psychiatry and clinical neuroscience*, *270*(2), 277-278.

Shrout, P. E., & Lane, S. P. (2012). Psychometrics. *Social work research*, 27(2), 94-104.

Sil, A., & Das, N. K. (2017). Informed consent process: Foundation of the researcher-participant bond. *Indian Journal of Dermatology*, 62(4), 380.

Sireci, S. G. (1998). The construct of content validity. Social indicators research, 45(1), 83-117.

Slate, R. N., & Vogel, R. E. (1997). Participative management and correctional personnel: A study of the perceived atmosphere for participation in correctional decision making and its impact on employee stress and thoughts about quitting. *Journal of Criminal Justice*, 25(5), 397-408.

Smith, P. B. (2004). Acquiescent response bias as an aspect of cultural communication style. *Journal of cross-cultural psychology*, 35(1), 50-61.

Snaith, R. P., & Zigmond, A. (1994). *The HADS: hospital anxiety and depression scale*. NFER Nelson.

Snaith, R. P., & Zigmond, A. S. (2000). Hospital anxiety and depression scale (HADS). Handbook of psychiatric measures. *American Psychiatric Association*, 547-548.

Søgaard, T. F., & Krause-Jensen, J. (2019). Bouncer service work: Emotional labour and flexible masculinity. *Journal of Organizational Ethnography*, 9(1), 30-43. https://doi.org/10.1108/joe-10-2018-0044

South, A. (2017). *How prison officers survive prison*. Winston Churchill Memorial Trust.

Souza, A. C. D., Alexandre, N. M. C., & Guirardello, E. D. B. (2017). Psychometric properties in instruments evaluation of reliability and validity. *Epidemiologia e Serviços de Saúde*, *26*, 649-659.

Spector, P.E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavio*r, 15, 385-392.

Spence, C. N., & Parikh, M. (2004). A women's college perspective on the education of college men. *New Directions for Student Services*, 1(107), 35-46.

Spencer, M. B., Fegley, S., Harpalani, V., & Seaton, G. (2004). Understanding hypermasculinity in context: A theory-driven analysis of urban adolescent males' coping responses. *Research in Human Development*, 1(4), 229-257.

Spinaris, C. G., Denhof, M. D., & Kellaway, J. A. (2012). Posttraumatic stress disorder in United States corrections professionals: Prevalence and impact on health and functioning. *Desert Waters Correctional Outreach*, 1-32.

Staiger, T., Stiawa, M., Mueller-Stierlin, A. S., Kilian, R., Beschoner, P., Gündel, H., & Krumm, S. (2020). Masculinity and help-seeking among men with depression: A qualitative study. *Frontiers in Psychiatry*, 1317.

Steiner, B., & Wooldredge, J. (2015). Individual and Environmental Sources of Work Stress Among Prison Officers. *Criminal Justice and Behavior*. https://doi.org/10.1177/0093854814564463

Streiner, D. L., Norman, G. R., & Cairney, J. (2015). *Health measurement scales: a practical guide to their development and use*. Oxford University Press, USA.

Sturdy, S. (1992). The political economy of scientific medicine: science, education and the transformation of medical practice in Sheffield, 1890–1922. *Medical history*, 36(2), 125-159.

Sullivan, J. P., & Mosher, D. L. (1990). Acceptance of guided imagery of marital rape as a function of macho personality. *Violence and Victims*, 5, 275–286.

Summerlin, Z., Oehme, K., Stern, N., & Valentine, C. (2010). Disparate levels of stress in police and correctional officers: Preliminary evidence from a pilot study on domestic violence. *Journal of Human Behavior in the Social Environment*, 20(6), 762-777.

Sur, S., & Ng, E. S. (2014). Extending theory on job stress: The interaction between the "other 3" and "big 5" personality traits on job stress. Human Resource Development Review, 13(1), 79-101.

Sykes, M. (1958). *The society of captives: A study of a maximum-security prison.* Princeton University Press.

Symkovych, A. (2018). Do men in prison have nothing to lose but their manhood? Masculinities of prisoners and officers in a Ukrainian correctional colony. *Men and Masculinities*, 21(5), 665-686.

Tabor, P. D. (2011). Vicarious traumatization: Concept analysis. *Journal of Forensic Nursing*, 7(1), 203–208.

Tambling, R. R., Russell, B. S., Fendrich, M., & Park, C. L. (2022). Predictors of mental health help-seeking during COVID-19: Social support, emotion regulation, and mental health symptoms. *The Journal of Behavioral Health Services & Research*, 1-12.

Tan, Y., Shaw, P., Cheng, H., & Kim, K. K. (2013). The construction of masculinity: A cross -cultural analysis of men's lifestyle magazine advertisements. *Sex Roles*, 69(5), 237-249.

Taris, T. W., Schreurs, P. J. G., & Schaufeli, W. B. (2019). From Job Demands and Job Resources to Well-Being and Job Satisfaction: The Role of Job Crafting. *Journal of Vocational Behavior*, 115(1), 1-10. doi: 10.1016/j.jvb.2019.01.002

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.

Tavakol, M., & Wetzel, A. (2020). Factor Analysis: a means for theory and instrument development in support of construct validity. *International Journal of Medical Education*, 11, 245.

The National Institute for Health and Care Excellence. (2016). Retrieved 21 March 2021, from https://www.nice.org.uk/guidance/cg3/documents/appendix-3-data-extraction-form.

The POA. (2022). Retrieved 11 August 2022, from https://www.poauk.org.uk/.

Thomas Jr, B. (2012). Predictors of vicarious trauma and secondary traumatic stress among correctional officers. *Philadelphia College of Osteopathic Medicine*, 1(1), 6-61.

Thompson Jr, E. H., & Bennett, K. M. (2015). Measurement of masculinity ideologies: A (critical) review. *Psychology of Men & Masculinity*, *16*(2), 115.

Thompson Jr, E. H., & Pleck, J. H. (1986). The structure of male role norms. *American Behavioral Scientist*, 29(5), 531-543.

Thompson, E. H., Jr., & Pleck, J. H. (1995). *Masculinity ideologies: A review of research instrumentation on men and masculinities. In R. F. Levant & W. S. Pollack, A new psychology of men* (129–163). American Psychological Association.

Toch, H. (1998*). Hypermasculinity and prison violence. In L. H. Bowker (Ed.)*, *Masculinities and violence* (pp. 168–178). Sage Publications.

U.S. Department of Health And Human Services, (2014). *Trauma-Informed Care in Behavioral Health Services*. Substance Abuse and Mental Health Services Administration.

U.S. Department of Justice. (2000*). Addressing correctional officer stress programs and strategies*. Office of Justice Programs.

Ullah, R., Ahmad, S. Z., & Khan, A. (2019). Employee involvement effect on reducing job stress. *Journal of Contemporary Economic and Business Issues*, 6(2), 69-82.

Umamaheswar, J. (2020). Policing and racial (in) justice in the media: Newspaper portrayals of the "Black Lives Matter" movement. *Civic Sociology*, 1(1), 1-4.

Uziel, L. (2010). Rethinking social desirability scales: From impression management to interpersonally oriented self-control. *Perspectives on Psychological Science*, *5*(3), 243-262*.*

VandenBos, G. R. (2007). *APA dictionary of psycholog*y. American Psychological Association.

Van den Bergh, L., & Den Hartog, D. N. (2017). A multi-level study of the effects of the Job Demands-Resources model on emotional exhaustion in correctional officers. *European Journal of Work and Organizational Psychology*, 26(5), 653-665. doi: 10.1080/1359432X.2017.1320902

Vogel, D. L., & Heath, P. J. (2016). *Men, masculinities, and help-seeking patterns. In APA handbook of men and masculinities.* (pp. 685-707). American Psychological Association.

Wade, T. (2018). The Invisible Kryptonite Among "Super" Helpers the Healers of Humanity: Advocating for Super" Helpers to Practice What They Preach to Clients. *Acta Psychopathology*, 4(1), 3.

Wagner, S. M. (2006). Supplier development practices: an exploratory study. *European journal of marketing*, 1(3), 1-7.

Walker, E. J., Egan, H. H., Jackson, C. A., & Tonkin, M. (2018). Work–Life and Well-Being in UK Therapeutic Prison Officers: A Thematic Analysis. *International journal of offender therapy and comparative criminology*, *62*(14), 4528-4544.

Wasylkiw, L. & Clairo, J. (2018). Help Seeking in Men. *Psychology of Men & Masculinity*, *19* (2), 234-242. doi: 10.1037/men0000086.

Weitzman, B. C., & Silver, D. (2013). Good evaluation measures: More than their psychometric properties. *American Journal of Evaluation*, 34(1), 115-119.

White, M. M., Clough, B. A., & Casey, L. M. (2018). What do help-seeking measures assess? Building a conceptualization framework for help-seeking intentions through a systematic review of measure content. *Clinical psychology review*, *59*, 61-77.

Wilhelm K (2009). Making sense of the complex depressed patient 2. Temperament and personality factors. *Medicine Today*, 10 (5), 32-44

Wills, C., Bates, K., Frost, N. A., & Monteiro, C. E. (2021). Barriers to help-seeking among correction officers: examining the influence of institutional culture and structure. *Criminal Justice Studies*, 34(4), 423-440.

Wolff, N., & Shi, J. (2012). Childhood and adult trauma experiences of incarcerated persons and their relationship to adult behavioral health problems and treatment. *International journal of environmental research and public health*, 9(5), 1908-1926.

Woodall, J., & Freeman, C. (2021). Developing health and wellbeing in prisons: an analysis of prison inspection reports in Scotland. *BMC Health Services Research*, 21(1), 1-9.

World Health Organisation, (2007). Preventing suicides in jails and prisons. Retrieved from: https://www.who.int/mental_health/prevention/suicide/resource_jails_prisons.pdf (Accessed 17th May 2021).

Wright, K. N., & Saylor, W. G. (1992). A comparison of perceptions of the work environment between minority and non-minority employees of the federal prison system. *Journal of Criminal Justice*, 20, 63-71.

Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of applied psychology*, *83*(3), 486.

Xanthakis, A. (2009). Levels of work-stress and burnout among prison officers. An examination of the need for a staff counselling service in a forensic setting. *Counselling Psychology Review*, 3, 1-11.

Xiao, Y., Liu, H., & Li, H. (2017). Integration of the forced-choice questionnaire and the Likert scale: A simulation study. *Frontiers in Psychology*, 8(1), 806.

Yousaf, O., Popat, A., & Hunter, M. S. (2015). An investigation of masculinity attitudes, gender, and attitudes toward psychological help-seeking. *Psychology of Men & Masculinity*, 16(2), 23.

Zijlmans, E. A., Tijmstra, J., van der Ark, L. A., & Sijtsma, K. (2019). Item-score reliability as a selection tool in test construction. *Frontiers in psychology*, 9, 2298-2304.

Title: Problems at work: Exploring the correlates of role stress among correctional staff. Year: 2009 Authors: Lambert, E Hogan, N. Tucker-Gail, K.	Yes (2)	Partial (1)	No (0)	Unknown	Comments
Study design					
1.Were the research aims clearly stated?	X				Yes – Explores antecedents and correlates of correctional staff role stress. Impact of: input into decision making, supervision, formalization, integration, job performance feedback, and instrumental communication have on role stress controlling for demographics.
2.Was the research design appropriate to address the aims?	X				Yes appropriate.

Participants and sampling					
3.Is the study's sample representative of the prison personnel population?	X				Yes
4.Was sample size justified?	X				Yes, calculated power supports adequacy of sample size.
5.Were the participants recruited in an acceptable way?	X				Yes – surveys were sent out to a full workforce.
6.Was consent for participants obtained?				X	There is no mention of whether consent was obtained.
7.Was the participation rate of eligible group at least 50%?	X				65%.
8.Were measures undertaken to address and categorise non-responders?		X			Follow up survey was done to increase participation, but those on sick leave / holiday weren't sent out surveys.
Method					

9.Were the risk factor and outcome variables measured appropriate to the aims of the study?	X				All appropriate. Lots of factors explored.
10.Were the measures used validated?	X				The paper merged 2 measures of job stress. I had to search further to find out if these measures were validated as this wasn't explicitly stated in the paper, but they were. The same had to be done for measures of decision making, supervision, formalisation, job performance feedback.
11.Was methodology (including stats) adequately described to be able to replicate?		X			The process was outlined but no details of how the survey was distributed. Stated a single follow up recruitment was done but doesn't outline how. No mention of timeframe to collect data.
Analysis					
12.Is the statistical method used is appropriate for the outcome studied?	X				Yes. OLS regression. Justification given.

13.Is it clear what was used to determined statistical significance and/or precision estimates? (eg, p values, CIs)	X				P values, regression slopes.
Results					
14.Was the basic data adequately described?	X				Descriptives table included and statistics given for all variables.
16.Considering the response rate, are there concerns for non-response bias? REVERSE SCORE	X SCORE 0				Study identified that some of the staff were on sick leave so could not participate. 65% response rate which is fairly low. This is addressed in limitations.
17.Were the results internally consistent?	X				
18.Is statistical significance of the association(s) tested and presented?	X				
19.Were confounding variables mentioned and considered?		X			Not explicitly stated but some were controlled for in analysis.
Discussion					

20.Were the authors' discussions and conclusions justified by the results?	X				
21.Were the limitations of the study discussed?	X				[
Quality	Total score: 35/44	Total 79.5%			

Appendix B - data extraction form

The below data extraction form was developed based on NICCE guidance

Data extraction form

Title of article	
Author(s)	
Source (eg. journal)	
Quality score	

Eligibility

P	Prison-facing personnel showing symptoms of stress & burnout	YES	NO
I	Static and dynamic factors	YES	NO
C	No comparator		
O	Measure of burnout Measure of occupational stress	YES	NO
Eligible to continue?			

Data extraction field	**Information extracted**
Methodology	
Research aims	
Type of study	
Research design	

Study setting	
Recruitment process	
Sample size	
Sample recruitment process	
Participant characteristics	
Data collection methods	
Quantitative measures used (if applicable) Validity of measures used	
Data Analysis	
Quantitative statistical test (if applicable) Confounding variables controlled for?	

Qualitative analysis methods	
Results	
Results of statistical test	
Main themes emerging from qualitative analysis Overall findings	
Conclusions	
Strengths of study (Journal rating) (Number of citations) (Quality framework score)	

Limitations of study	
Applicability of the findings	

Appendix C - Ethical approval from University of Birmingham

Dear Dr Oliver

Re: "The role of different attitudes and values on help-seeking and perceptions of wellbeing support services in prison officers"
Application for Ethical Review ERN_20-1166

Thank you for your application for ethical review for the above project, which was reviewed by the Science, Technology, Engineering and Mathematics Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards

Sue

Please remember to submit a new **Self-Assessment Form** for each new project.

Click **Research Governance** for further details regarding the University's Research Governance and Clinical Trials Insurance processes, or email researchgovernance@contacts.bham.ac.uk with any queries relating to research governance.

Appendix D - Consent form

Name: Beth Wright (University of Birmingham postgraduate researcher)

By completing the questionnaires, you are consenting for your data to be used in this research, and that you understand the following:

- The research will involve completing 4 questionnaires measuring your attitudes and values, levels of anxiety and depression, perceptions of the work environment and willingness to seek wellbeing support.

- I understand that my participation is voluntary and that I am free to withdraw my contribution without requiring a reason until data analysis commences in April 2021. After this date, the information will have been added to the data set and anonymised and would not be able to be removed. If I withdraw, my data will be removed from the study and will be destroyed. This will not have any effect on me in the workplace.

- I understand that my data will be kept strictly confidential throughout data collection and analysis, and in all work extending from this study.

- I understand that my personal data will be processed for the purposes detailed above, in accordance with the Data Protection Act 2018.

Based upon the above, tick the box if you agree to take part in the study ☐

A unique, anonymous participant ID will be issued to you following completion of the study - please note this down. If you choose to withdraw your data from the study, this code will be used to remove your information.

Appendix E - Participant information sheet

Study: The role of different attitudes and values on help-seeking behaviour and perceptions of wellbeing support services amongst prison officers.

I am a forensic psychology doctorate student at the University of Birmingham completing research which aims to increase our understanding of the prison officer population and build on the limited existing research in this field.

Aims: The aim of this research is to explore prison officers' willingness to access wellbeing support services, and the extent to which different attitudes and values may affect this.

Procedure: Participants will complete 4 short questionnaires:

- EssenCES: a measure of social climate which explores what it is like to work within the prison environment.

- A questionnaire examining attitudes and values.

- A questionnaire examining your perceptions of accessing wellbeing support services.

- Hospital Anxiety and Depression Scale (HADS).

Data processing and storage

Your data will be anonymised using a unique code to ensure confidentiality. Your information will be securely stored prior to analysis in a secure data storage system called BEAR provided by the university. During the data analysis stage, only the post-graduate researcher and the academic supervisor will have access to the data.

Participation in this study is entirely voluntary, and you can withdraw your participation before April 2021. After this point, your information will have been added to the data set and cannot be removed. If you have any questions regarding the research, please use the contact details below.

This study has been reviewed and has received a favourable ethical opinion from the Research Ethics Committee at University of Birmingham.

Contact details:
Postgraduate researcher: Beth Wright

Supervisor: Dr Caroline Oliver

Appendix F - Help-seeking questionnaire completed on Qualtrics

Age: Gender: Officer rank: (eg. Prison officer, supervising officer, custodial manager etc):
Years in service:
Since the COVID-19 pandemic, has your role changed? ☐Yes   ☐No

1. I have accessed, or I am currently accessing wellbeing support services.	YES	NO

If you answered 'Yes' to question 1, please answer questions 8-13. If you answered 'No', please answer questions 2-7.

2. Are you aware that there are wellbeing support services offered by the prison service for officers?	YES	NO

If you answered 'yes' to the above, which ones do you know about? (please list)

Select the box that most closely reflects how you feel about the statement

	Not at all 1	2	3	4	Somewhat 5	6	7	8	9	Extremely 10
3. Currently, I feel like I need support.										
4. I know how to access support services.										
5. Wellbeing support services for prison officers are important.										
6. Wellbeing support services would be effective.										
7. If I felt I needed support, I would feel able to reach out to wellbeing support services.										

If you answered between 'Not at all' and 'Somewhat' to statement 7, what makes it difficult to reach out to support services?

8.   Which wellbeing support service(s) have you accessed?

9.   If you know of any other wellbeing support services available for prison officers, please list below:

10. Accessing support services was my own choice, without being told by others.	YES	NO

Select the box that most closely reflects how you feel about the statement

	Not at all 1	2	3	4	Somewhat 5	6	7	8	9	Extremely 10
11. I have found the support service I accessed helpful.										
12. I think wellbeing support services for prison officers are important.										
13. I would access wellbeing support services again in the future if I felt I needed them.										

Appendix G – Debrief screen

This is your unique participant ID: [REDACTED]
Please make a note of this. You will need to quote it if you decide to withdraw your participation in the future. You have until **1st September 2021** to request to withdraw your data. After this date, data analysis will have commenced and you will be unable to withdraw participation.

Please make sure to click the SUBMIT button at the bottom of the page, to ensure your survey reponses are saved.

Thank you for taking part in this research project. For this study, it was important that we did not fully disclose more specific information about the attitudes and values we were measuring. Now that your participation is completed, we will provide you with more detail information about what we seek to measure. The attitudes and values that were measured related to your levels of hypermasculinity. Two dimensions were measured – your perception of 'danger as exciting' and 'violence as manly'. If you have any further questions or wish to withdraw your data, please contact myself or my supervisor.

If you are feeling distressed following your participation, you can seek support from the prison Employee Assistance Programme (EAP), which provides a free 24/7 advice and support service and online self-help resources.

EAP contact details: [REDACTED]   (Username: [REDACTED]
Password: [REDACTED]

Alternatively, if you feel unable to approach work-based support services, we suggest that you contact your GP. If you require immediate support, the Samaritans offer a free 24/7 helpline. Call 116 123 or find more information at https://www.samaritans.org.

Following the analysis, findings from the research will be disseminated through the Prison Officers Association. The final write-up of the research will also be published in the University of Birmingham's on-line e-thesis repository and may be published in a peer-reviewed journal too. If you would like to request an individual copy of the final write-up, once it is completed, then please contact the postgraduate researcher (see below).

Contact details: Postgraduate researcher: Beth Wright [REDACTED]

Supervisor: Dr Caroline Oliver [REDACTED]

Please click the button below to ensure your response is submitted.