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REVIEW

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Correctional officers and the ongoing health implications of prison work

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Abstract

Correctional Service Providers (CSP), including Correctional officers (COs), are key front-line figures in prisons globally, with responsibility for a wide range of daily prison operations. Over the past decade, research on prison staff has massively grown. However, the portrait this scholarship draws is concerning. Research focusing on the physical, mental, and social wellbeing of prison staff consistently paints a picture of a deeply unhealthy group of people, with above-average levels of physical health concerns. Likewise, recent literature suggests correctional employees are facing a mental health crisis, with high prevalence of mental health disorders and self-harming behaviors, even when compared to other law enforcement personnel. Further, scholars have expressed concerns about the social and cultural wellbeing of staff, factors that directly impact daily prison operations. We conduct a broad overview of the literature on correctional worker health and wellness, identifying key themes and major areas of concern. We conclude by identifying key challenges and proposing areas for future research.

Introduction

Prisons are notoriously difficult to access for researchers, meaning the challenges facing people who are incarcerated (hereafter referred to as incarcerated people) have historically tended to serve as the focal point of prison research. Within these portraits, correctional officers (COs) and correctional service providers (CSP) have often served as secondary figures (Liebling, 2000). Over the past 15 years researchers have worked to fill this gap, highlighting the unique challenges facing prison staff (Arnold, 2016; Ricciardelli, 2019). Much of this work has drawn a concerning portrait of CSP health, and researchers have suggested their wellbeing may affect the broader operations of prisons (Frost & Monteiro, 2021; Ricciardelli et al., 2022a, 2024a). In aggregate, the literature suggests prison staff are the unhealthiest of all law enforcement personnel, with seriously compromised physical, mental, and social health and measurable rates of posttraumatic stress disorder (PTSD) that approach or exceed that of military combat veterans (Carleton et al., 2018; James & Todak, 2018).

For this article, we conduct a broad literature review of the current prison worker health and wellness literature, including both custodial and non-custodial prison staff. Based on themes emerging from this review, we organize this article as follows. First, we briefly contextualize CSP health in historical framings of prison work. We then summarize recent developments in CSP research, focusing on social, physical, and mental health. Here, we suggest COs are one of the least healthy groups in law enforcement. Third, we conclude by identifying gaps in the research, policy and practice considerations, and future research directions.

Correctional service providers within the literature

Researchers have examined prisons for well over 60 years but have not systematically analyzed CSP experiences until recent decades, likely for two reasons. First,

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distinctive subcultural boundaries in prison complicate research access. Researchers who attempt to speak to both incarcerated people and prison staff frequently find themselves classified as being on one side or the other, muddling recruitment efforts (Crewe, 2009; Schultz, 2022). Consequently, researchers often highlight the experiences of *either* CSPs or incarcerated people. This divide appears in most research, except in unusual cases such as therapeutic living units or Nordic-style institutions designed to reduce the influence of prison subcultures (see Bucerius et al., 2023; Schultz et al., 2024 for partial exceptions). Second, CSPs, and COs specifically, possess distinctive cultural values expressed through a working personality that enacts solidarity and suspicion toward outsiders (Carbonell & Ricciardelli, 2023; Haggerty & Bucerius, 2021; Higgins et al., 2022). These values appear to influence the sorts of scholarly work completed with COs, as officers may be suspicious of researchers' intentions and motivations (Schultz, 2022). These tensions have complicated the sorts of information researchers are able to collect on CSP experiences, although recent work suggests they are far more willing to participate in research discussing health-related issues (Ricciardelli et al., 2024a, 2022a).

Historical accounts of CSP health

Despite these gaps, researchers—especially scholars studying U.S. prisons—have described COs and CSP as an unhealthy population since at least the 1970s (Cheek & Miller, 1983). Lombardo (1989), a prison educator in New York State, detailed the social characteristics of COs in the state prison where he worked. His participants described feeling trapped by the job and detailed the negative consequences of stress and exposure to violence. Kauffman (1988) built on these accounts in her analysis of officers working in the Massachusetts state prison system. Her participants discussed experiencing extreme levels of violence, poisonous officer/management relationships, family breakdowns, and psychological effects of work which bear strong resemblance to undiagnosed PTSD. Kauffman's participants also detailed significant levels of alcohol misuse as well as a strong 'officer code' that limited their willingness to seek help. Importantly, health was not the main object of analysis in these pieces, and was discussed as a secondary finding.

In the early 1990s, political conditions changed, particularly in the U.S., leading to less research on prisons broadly and on CSPs specifically (Simon, 2000; Wacquant, 2002). In consequence, portraits of prison staff during the 1990s and early 2000s are mostly based on research from Canada, Australia, and Europe. These snapshots continue to detail significant problems impacting officer health and wellness. For example, Dollard and Winefield (1995) detailed far higher levels of strain and anxiety among Australian prison workers compared to any other public sector employees, including police. Crawley's (2004a, b) work detailed how English COs used emotional labor in their daily routines, something that helped them in their work but had deeply negative implications for their social relationships outside of prison. Likewise, Liebling et al. (2011) suggested CSP wellness and health distinctly influence prison operations and conditions experienced by incarcerated people. And Svenson et al. (1995) found that 58% of Canadian COs in their sample had used or were using illegal drugs, far above the comparable national average of 20%.

Over the past 15 years, researchers have filled this gap with a massive amount of new scholarly work. Books, special issues of journals (Smith, 2023), and a significant increase in original qualitative and quantitative research have provided new insights into how prison staff perceive their work (Higgins et al., 2022; Lavender & Todak, 2021; Schwartz et al., 2024). In contrast to earlier framings, which tended to focus on CSP corruption, abuse of power, and the socially tainted nature of prison work (Toch, 1978; Zimmer, 1986), CSP health—and specifically, mental health—is the central object of analysis in almost all of this research (Ricciardelli, 2019). Perhaps for this reason, much of this work is sympathetic toward CSPs, a sharp contrast to historical accounts of prison work which framed prison staff as archetypes of brutality and implicit corruption (Toch, 1978).

In what follows, we review 106 articles with an eye to identifying the key themes emerging from this new body of literature. Our goal is not to produce a comprehensive literature synthesis or systematic review of CSP health, which other authors have ably completed in recent years (Ferdik & Smith, 2017; Miller et al., 2022; Montoya-Barthelemy et al., 2022; Regehr et al., 2021). Rather, our goal is to summarize and highlight key issues facing prison staff internationally. In doing so, we hope to identify future goals, practical implications, and directions for the burgeoning field of CPS health research.

Method

To identify articles for review, we searched relevant databases for literature on CPS wellness. We focused our search on CPS, a diverse group including custodial and non-custodial employees, to ensure we gathered a broad and representative body of work. Our database search included Policy Commons Open Access, Canadian Electronic Library from Canada Commons, HeinOnline Government, Politics & Law in Canada, PsycINFO, Criminal Justice Abstracts, Sociological Abstracts, JSTOR, Web of Science, ProQuest Dissertations and Theses Global, and the Government of Canada website. We developed

a systematic search procedure to identify relevant literature, beginning by finding and classifying articles tied to CPS health to create a comprehensive list of search terms for the following categories: (1) correctional worker physical health; (2) correctional worker social health; and (3) correctional worker mental health. We tried terms from each category in different combinations to provide the most comprehensive results. The final search string was:

> *("Correctional Worker" OR "Correction" OR "prison") AND ("health" OR "social" OR "mental health" OR "wellbeing" OR "well-being" OR "wellness" OR "moral injury" OR "depress" OR "insomnia" OR "sleep" OR "substance use" OR "anxiety" OR "suicide").*

This search yielded 81 unique articles drawn from a wide range of international locations.[1]

After identifying relevant sources, we conducted a detailed abstract review of each article. Based on themes which emerged from this process, we organized the articles into broader categories focusing on CPS mental health, physical health, or social health. We then conducted a detailed review of each article, summarized the major arguments, and identified unique methods and approaches. In doing so, several prominent themes naturally emerged from the broader article set, as did several gaps. We present these themes below. Importantly, we also conducted targeted literature searches around specific topical gaps and include 25 additional relevant articles that emerged from these searches in our analysis.[2] As these articles were all published, we did not require ethics approval. Given space constraints and the few books written on CSP health, we excluded books from our review.[3] We found it impossible to discuss the specifics of each publication here, thus we elected to draw on articles that we believe are good representations of specific research areas.

Findings

Mental health

CSP mental health represents the largest proportion of new work in this area, and for good reason (Regehr et al., 2021). Researchers draw an unambiguously grim portrait of CSP mental health and consistently comment on the significant levels of stress and violence COs and CSP encounter, something which may explain why many describe danger, risk, and rampant uncertainty as a normal feature of their work (Martin et al., 2012; Ricciardelli et al., 2022a; Schultz, 2024). Staff retention crises in U.S. prisons (and, to a lesser extent, prisons globally[4]) mean many CSP work extensive amounts of overtime to maintain appropriate staffing levels (Zhang et al., 2024); increased levels of overtime, in turn, appear to create a contagion effect, making all within a workplace more stressed (O'Connell et al., 2024). Given these pressures, CSPs experience high levels of burnout (Buden et al., 2016; Ricciardelli et al., 2024a). Burnout may *cause* symptoms of depression or be *caused by* symptoms of depression (Jaegers et al., 2020), but regardless of the direction of this relationship, researchers have noted high levels of burnout among North American, South American, European, and Asian COs (Sygit-Kowalkowska et al., 2021; Useche et al., 2019; Zhang et al., 2024).

In aggregate, these factors lead to one of the highest levels of measurable mental health disorders detailed among a single occupational group. In a recent article assessing the mental health of Canadian CSPs, Ricciardelli et al. (2024a) found that 37.3% of participants met the criteria for Major Depressive Disorder, 27.8% of respondents experienced symptoms consistent with Generalized Anxiety Disorder and/or Panic Disorder (19.0%), while another 5.5% reported Alcohol Use Disorder. These findings are in line with a large body of research which describes alarming levels of PTSD among prison workers. Prevalence of PTSD consistently ranges from 19 to 29% among CSPs, rates that match or exceed combat veterans (Carleton et al., 2018; James & Todak, 2018; Lavender & Todak, 2021; Ricciardelli et al., 2023a). While extreme, scholars in both the U.S. and Canada have independently arrived at similar statistics, suggesting that PTSD is a consistent issue for prison staff in a range of prisons and international settings.

Levels of trauma exposure and associated stress are correlated with self-harm and suicide, and several recent research projects have examined self-harming behaviors among correctional staff (Ricciardelli et al., 2024a, 2024b, 2024c). In Canada, over 7% of Carleton et al.'s (2021) 974 participants self-declared as having had suicidal ideation, while 2.6% reported planning self-harm behaviors. Likewise, Ricciardelli et al. (2024a) examined Canadian CSP self-harm behaviors before and during the COVID-19 pandemic. Prior to COVID, 29.8% of participants had

[1] Our full list is available as a supplemental item. The first author is also happy to provide a list upon request.

[2] Also available as a supplemental item.

[3] The most relevant book we found (Smith, 2023) was first published as a special journal issue (see Smith, 2021), meaning its content were included in our overview.

[4] Given the broad, international nature of the article set we draw on, we do not differentiate between jails, penitentiaries, and prisons here. Such terms have clear definitions in U.S. research but are comparatively meaningless in the international literature. We fear that efforts to consistently use and apply U.S. definitions would create more confusion than clarity, and we consequently use the term "prison" as an umbrella concept, referring to a secure custodial institution of some form. This usage is broadly consistent with international research.

lifetime ideation, 14.7% had planned to complete suicide in their lifetime, and 7.2% had attempted. Officers surveyed during COVID-19 reported ideation at a rate of 27.8%, attempts at 14.5%, and 7.1% had attempted death by suicide (Ricciardelli et al., 2024c). In Massachusetts, U.S., a large case-study project headed by Frost comprehensively examined suicide and suicidal ideation among COs. In a range of articles, Frost and co-authors suggest suicide is a major problem for current and former COs, and detail specific factors surrounding at least 20 COs who died by suicide in a five-year period between 2010 and 2015 (Frost & Monteiro, 2020).

Despite CSP narratives about coworker suicides, researchers have not examined this topic in much depth, due to challenges around how to determine the specific causes of suicide.[5] Ricciardelli and Frost's research provides a research-backed foundation for concerns about CSP self-harm. Frost's project interviewed family members of COs, who identified mental health concerns, specifically depression and addiction, as major themes among officers who had completed suicide. Furthermore, "… family members and friends tied the substance abuse problems directly to correctional work and an occupational culture in which going out after work for drinks is the norm" (Frost & Monteiro, 2021, p. 13). Frost and Monteiro's work draws a direct connection between occupational cultures and self-harming behaviors:

> *Across many of the officer suicides studied, extensive exposures to violence and expectations that officers should be tough and 'suck it up' together with the stigma associated with both mental illness and help-seeking in the occupational culture in corrections interacted with those known individual-level risk factors for suicide (Frost & Monteiro, 2021, p. 16; see also Frost & Monteiro, 2020).*

Being stoic, "tough" and "hard" are common themes in the literature on CPS, particularly CO, work cultures, as are personality changes resulting from prison work (Arnold, 2016; Crawley, 2004b; Higgins et al., 2024). However, such themes also create barriers to help-seeking. Within Frost et al.'s research, institutional and occupational cultures—specifically, hypermasculinity among officers, as well as mental health stigma (Garrihy, 2022)—were reinforced by structural barriers, as contentious and punitive relationships with managers and a lack of confidentiality in the reporting process made mental health struggles a "risk" CSP tended to "hide" (St. Louis et al., 2023; Wills et al., 2021). Officers described "sucking it up and dealing with it" (Frost & Monteiro, 2020, p. 1291), persevering despite psychological damage to maintain and secure the financial benefits of retirement pensions and the social benefits of in-group acceptance (Carbonell & Ricciardelli, 2023). Unfortunately, retirement did not bring peace for a sub-section of Frost's participants, who completed suicide shortly after leaving prison work.

Overall, Frost et al. suggest suicide levels among officers are related to structural features of prison work, individual and social psychological factors, and elements of officer workplace culture (Frost & Monteiro, 2020; Frost & Monterio, 2021). Distressingly, Frost and Monteiro also suggest their research may only hint at the scope of this issue:

> *[A]s we present our findings around the [United States], we are regularly approached by other departments who express that they too are increasingly concerned about what they perceive to be a significant increase in correction officer suicide in recent years. We have learned over these past five years that the cluster of officer suicides in Massachusetts that we had hoped might be an anomaly may not be an anomaly at all (2020, p. 1296).*

As this brief overview suggests, prison staff mental health represents a severe crisis, as challenges including rampant PTSD and suicide appear to be normal features of many custodial and non-custodial settings. While a range of new programming approaches and options such as Total Worker Health™ seem promising (El Ghaziri et al., 2020; Namazi et al., 2021a), the literature tends to suggest the scale of the challenge is far beyond the scope of any one program, approach, or policy revision.

Physical health

The body of literature on CSP physical health is smaller than the work on mental health. However, research clearly shows that prison work has distinctive physical consequences. Correctional staff have a greater than average risk of heart attack and poor cardiac health, all exacerbated by consistently elevated levels of obesity (Buden et al., 2016). Prison work is also associated with higher-than-average musculoskeletal injury and disorder, even when compared to industrial workers, and Warren et al.'s (2015) work suggests organizational and operational factors such as shift work and long hours standing play a significant role in creating musculoskeletal injuries for COs specifically. Overall, research suggests that "… of all U.S. workers, correctional officers have one of the highest rates of nonfatal, work-related injuries" (Konda et al., 2013, p. 122).

[5] Such narratives are well-known among front-line correctional staff and have long been an informal topic of discussion. For instance, one of this paper's authors worked as a CO in Canada before beginning graduate school and knows of at least three former coworkers who have taken their own lives over the past decade. In Ontario, Canada, 10 COs have taken their lives in the last 18-month period.

A broad range of factors impact COs' physical health. Cassiano et al. (2022b) found that prison staff expressed significant fears about catching diseases from incarcerated people, a factor exacerbated by the challenges of COVID-era prison work. Likewise, research points to the implications of broader lifestyle choices. Burt (2020) found that Russian officers who smoked had much worse health than those who did not. However, even when accounting for lifestyle choices, Burt found that her participants suffered from higher-than-average physical health problems (2020; Warren et al., 2015). The spatial location of prisons, penitentiaries, and jails may exacerbate the impact of lifestyle factors: many newer U.S. institutions have been built in poor, rural areas, implying that the CSPs who work in these facilities may be coming from lower socioeconomic status and groups with poorer overall health (Eason, 2017; Genter et al., 2013).

Research suggests stress and mental health concerns are directly linked to CSP physical wellbeing. For example, international research has identified sleep quality as being dramatically lower among CSPs than among people working comparable careers. Brazilian COs get much less sleep and much poorer sleep than comparative groups (Gonçalves et al., 2023), and 43% of Polish prison staff and 26% of Indonesian correctional workers report struggling with insomnia (Sygit-Kowalkowska et al., 2021). Compromised sleep is likely related to shift work, where officers regularly rotate through schedules which include working evenings and overnight. Research on shift work suggests a range of negative implications, harming individuals' cognitive and emotional functions as well as disrupting their biological clock (Brower, 2013). CSPs also work significant amounts of overtime, a consequence of poor staff retention and low staffing rates reported in a range of different settings (O'Connell et al., 2024; Schultz, 2022). Regardless of the cause, poor sleep predisposes CSPs to illness and exacerbates chronic conditions such as high blood pressure, obesity, and cardiovascular disease (Gonçalves et al., 2023).

These factors appear directly related to stress, as most articles discussing CSP physical health draw attention to the taxing occupational context of prison work (St. Louis et al., 2023). Over time, chronic stress has direct effects on prison workers' physical health, diminishing the impact of otherwise-positive lifestyle decisions. For instance, Morse et al.'s (2011) participants had chronic levels of obesity despite reporting higher-than-average levels of physical activity, something the authors explained by pointing to how occupational stress diminished the positive impact of physical activity (see also Warren et al., 2015).

These health factors exist outside of the range of physical threats to safety that are a 'normal' part of the CSP role. Prison work is notoriously risky, and CSPs, particularly COs, from a wide range of international settings routinely experience violence and threat as part of their day-to-day routines (Ricciardelli et al., 2018; Zhang et al., 2024). Konda et al. (2012) have attempted to explain high levels of musculoskeletal injuries by pointing to the violent nature of prison work, suggesting that assaults and use-of-force caused up to 38% of nonlethal officer injuries in their research (Konda et al., 2013). This is not a clear finding however (Warren et al., 2015), as individual reactions to violence seem to vary depending on the security classification, the specific institution under study, the amount and quality of social support available, and other organizational characteristics. Furthermore, new research draws closer connections between exposure to violence and mental injury, rather than physical injury (Schwartz et al., 2024). For instance, Zhang et al. (2024) suggest exposure to violence among Chinese prison staff creates burnout and mental health challenges, rather than physical injury, a relationship they suggest is mediated by high levels of overwork. Likewise, Ricciardelli et al. (2018) suggest officers engage in emotional labor to deal with the effects of prison violence (see also Crawley, 2004b), but in doing so, normalize violence to downplay the potential risks and dangers associated with CO work (Higgins et al., 2024; Martin et al., 2012; Schultz, 2024).[6] It is not clear whether such findings have to do with selection bias, as CSP who have experienced physical violence may not be at work and may be overlooked by common research sampling approaches. However, such normalizations have clear mental health implications and harm CSP social wellbeing.

CSP physical health does not seem to be as well-studied as their mental health, but despite this, research clearly shows that prison staff disproportionately experience poor physical health outcomes. Many of the factors detailed here have direct connections to stress and mental health challenges, something which highlights the importance of examining CSP health holistically. Overall, prison work takes a harsh physical toll on correctional employees—something graphically driven home by Warren et al.'s (2015) finding that COs under 50 have "more than twice the mortality rate of other, similarly aged state employees" (p. 262; see also Morse et al., 2011). Unfortunately, similar statistics do not exist for CSPs more broadly.

Social health

Prison work also harms the social wellbeing of CSPs. Positive social relationships are a key factor in individual welfare, and while the direct connections between

[6] This is also the case for Canadian parole officers (Ricciardelli et al., 2024a).

CSP social relationships and individual health remain understudied, research on occupational cultures implies a link between these areas. CSP social relationships are often laced with distrust and are mediated by exposure to violence (Higgins et al., 2022; Schultz, 2024). While this affects the mental and physical health of CSPs, it also has negative implications for their social well-being, reshaping how CSPs relate to their coworkers, their supervisors, significant others, and incarcerated people. Relationship breakdown and complex in-group/out-group interactions have been a theme in CSP research for decades (Cheek & Miller, 1983; Crawley, 2004a; Kauffman, 1988; Stevens & Schultz, 2024), leading us to believe the social health of correctional staff deserves specific mention here.

Social relationships have a direct effect on the health and wellbeing of CSPs. While scholars often point to occupational stressors as the primary cause of CSP strain, research also argues that supportive social networks play a key mediating role in helping prison staff deal with work-related stress (Dollard & Winefield, 1995; Namazi et al., 2021b). The key relationships are between frontline correctional staff, who 'watch each other's backs' and depend on each other for safety (Harvey, 2014; Martin et al., 2012; Schultz, 2023, 2024). Support from managers and other supervisors is not always correlated with individual wellbeing (Coulling et al., 2024; Isenhardt et al., 2019), although Lambert et al. (2023) argue a supportive supervisory framework is associated with better health outcomes. Some researchers even suggest supportive environments from family and significant others are a *cause* of increased stress, likely because of how CSP feel about bringing complex parts of their work home (Isenhardt et al., 2019).

Garrihy provides insight into this curious finding by suggesting even the 'good' parts of prison work caused stress and cognitive dissonance for the Irish prison officers he interviewed, tainting their interactions with people outside of prison in distinctive and painful ways (Garrihy, 2022; Turner et al., 2023). For instance, officers often describe black or dark humor as a necessary coping strategy that helps them to deal with work-related trauma (Garrihy, 2022; Higgins et al., 2024). Black or dark humor is a common form of cognitive defense for law enforcement, and CSPs often describe humor as an essential coping strategy (Higgins et al., 2024). However, dark humor is also associated with awkward social situations and even social ostracization from people who do not understand the prison context, meaning one of the common coping strategies CSP employ harms their ability to communicate with people outside the prison setting (Stevens & Schultz, 2024). Garrity draws links between these outcomes and the overall operation of the prison, suggesting "the occupational environment, cultures and mental health of officers directly impact prisoners' psychological care and experiences" (Garrihy, 2022, p. 995).

CSPs frequently engage in significant levels of emotional labor as part of their work, and while the challenges of emotional labor are well-known (Perry & Ricciardelli, 2021; Ricciardelli et al., 2024a; Trounson et al., 2022), the broader effects of emotional labor on prison employees' lives outside of work are still foggy. The stress of prison work often influences how CSPs relate to people outside of the prison, harming even romantic relationships (Kauffman, 1988; Tracy, 2004). Cheek and Miller (1983, p. 111) suggest COs have a divorce rate twice as high as the national average, although such claims are dated. Higgins et al. (2024) detail the degree of stress officers experience in the community due to their work, which can negatively affect families and relationships with significant others. Stevens and Schultz (2024) suggest we can understand these challenges as a form of institutionalization, like forms experienced by incarcerated people.

Much of the research on CSP health recommends developing and sustaining a supportive social environment among correctional staff. For instance, one of this article's authors (Ricciardelli) has extensively examined Peer Support Programs (PSP), designed to help CSP support coworkers struggling with mental health and work-related stress (Ricciardelli et al., 2021). Such programs, when properly administered, reinforce the close social bonds that often characterize CSP relationships and help address the distinctive stressors of prison work (Ricciardelli et al., 2023b). However, the long-term efficacy of such programs is unclear: peer support is usually informal, and formal updates of institutionalized PSP are minimal due to distrust between diverse CSP (e.g., officers and managers) as well as concerns over confidentiality (see Schultz, 2022). Thus, despite evidence supporting peer support programs (Isenhardt et al., 2019; Ricciardelli et al., 2023b), we believe formal PSP evaluations are needed to determine if such programs make a positive difference.

Crucially, occupational cultures may diminish the efficacy of PSP, as well as other programs designed to help correctional staff. Scholars routinely draw connections between mental health, the risks CSPs encounter every day, and the broader cultural frames CSPs employ to help understand their work (Higgins et al., 2023; Ricciardelli et al., 2024a; Schultz, 2024). Lambert et al. (2018) accurately point out that CSPs consistently overestimate their odds of being assaulted by incarcerated people, thereby misidentifying the levels of risk they face. However, Higgins et al. (2023) and Schultz (2024) have separately argued that COs' perceptions of physical risk directly inform the cultural frames officers use to interpret the world—something Schultz describes

as an axiomatic presumption of vulnerability, shaping every aspect of how COs view the world. Such attitudes are also found among other non-custodial and custodial staff, particularly people working with sex offenders (Ricciardelli et al., 2024a). These perspectives lead to harsh, restrictive, and sometimes paranoid cultures that justify use of force and the dehumanization of criminalized people (Higgins et al., 2022; Schultz, 2023). In short, while CO (and CSPs more broadly) estimates of just how risky their jobs are may lead them to overestimate their own vulnerability (Lambert et al., 2018; Schultz, 2024), there is little question that perceived risk and fears of being victimized reinforces the worst parts of CSP culture, with negative effects on everyone within institutional correctional settings and with collateral consequences for their private lives (Hull et al., 2023; Ricciardelli et al., 2022a). This in turn may create even more stress, further harming CSP health.

While we believe anything that may improve health and improve social relationships among prison staff is a positive step forward, the broader research on CSP cultures and social environments tempers our optimism about the larger effects of such programs. The social setting many CSP experience is complex, fraught with institutional politics, and negative cultural values. COs specifically describe their coworkers and managers as the most important *and* the most negative feature of their work, and frame officer cultures as a stressful part of their lives (Cassiano & Ricciardelli, 2023; Schultz, 2024). Researchers describe CSP cultures as harsh, reactionary, resistant to change, and control focused (Higgins et al., 2023;Ricciardelli et al., 2024a; Schoenfeld & Everly, 2022; Schultz et al., 2021), and extreme examples of prison staff mistreating each other are common. For instance, Press (2021) describes officers threatening to assault coworkers who breach subcultural expectations, a finding echoed by Schultz (2024). Such pressures poison relationships between everyone in prison.

Despite years of professionalism training and managerialist approaches designed to ensure best practices among front-line custodial prison staff (Liebling et al., 2011; Tait, 2011), negative cultures continue to affect prison staff, directly impacting CSP stress levels and health (Liebling & Kant, 2018). Furthermore, such factors directly affect how CSPs relate to incarcerated or paroled people, harming the broader organizational culture of prisons overall (Ricciardelli et al., 2023b). Such factors draw attention to the broader structural pressures facing prison staff. As Garrihy states, "An environment and workplace that provokes anxieties necessitating such psychological processes and defences to manage within it while causing pernicious effects on staff who feel tainted from multiple sources are distinctly problematic" (2022, p. 995). His conclusion—which cites Mathiesen (1965) and other core abolitionist texts—directly connects officer mental health struggles to the broader carceral environment. As a result, Garrihy suggests officer workplace cultures directly reflect the broader structural shortcomings of prisons, with much larger implications for the broader state of CSP health research overall.

Implications and future research directions

In this article, we attempt to broadly summarize some of the major health related problems challenging correctional workers. We suggest these challenges are substantial and may threaten the daily operations of correctional services in distinctive and meaningful ways (Lambert et al., 2005; Ricciardelli et al., 2022a). We argue that meaningfully addressing CSP health concerns is one of the key challenges facing prison administrators, stakeholders, and governments over the next decade.

Many of the challenges we discuss have distinctive structural elements which reflect the broader crisis of hyper-incarceration (Wacquant, 2001). For instance, CSP health concerns are broadly connected to prison overcrowding, as well as witnessing or experiencing violence (Martin et al., 2012; Schwartz et al., 2024; Schwartz & Allen, 2024). Likewise, CO fears about disease contagion are related to social patterns of inequality, which dramatically overincarcerate impoverished and unhealthy segments of the population (Cassiano et al., 2022b). Without meaningful efforts to reduce the pressures on overcrowded, violent, and unhealthy institutions, we fear few positive changes in CSP health and wellbeing will emerge over the next decade. This situation highlights the need for systemic, innovative solutions for prison overcrowding and poor conditions of confinement, a caveat which influences all our recommendations.

Despite the significant growth in CO health research over the past ten years, we note several gaps in the broader research portrait which reduce the effect of new efforts to address the problems we have noted here. First, in our research for this article, we noted distinct fractures along jurisdictional boundaries. For instance, while we have a clear understanding of how CSP mental health functions in specific U.S. states, a similar national portrait does not exist. This represents a distinctive gap, as individual U.S. states vary tremendously in how they manage incarceration. Research in other jurisdictions have succeeded in creating larger national datasets (Ricciardelli et al., 2024a; Dollard & Winefield, 1995), allowing researchers to make informed claims about whether specific concerns are a result of jurisdictional differences, prison cultures or staffing, or reflect broader systemic problems. While

the size of the U.S. makes such a project challenging, we believe a cross-national study focusing on the health and wellbeing of U.S. CSPs seems like an obvious next step, as does active comparisons between staff in prisons, penitentiaries, and jails. Such a project should also consider examining the health and wellbeing of community correctional workers, whose perspectives are often overlooked (Ricciardelli et al., 2024a). We believe such work would also be beneficial in European, Asian, and African settings, the latter two of which are overlooked in prison research more generally (Zhang et al., 2024).

We also noted disconnects within the broader CO literature. Currently, most research—including some we have conducted—deals with the realities facing CSPs in silos, focusing on specific questions while neglecting a broader, holistic picture of the challenges facing CPSs and correctional services more generally. For instance, research focused on CO mental health does not consistently discuss the influences of officer culture, focusing instead on specific measurements of prevalence with limited reflections on the daily implications of such factors (but see Frost & Monteiro, 2020). Likewise, research on interactions between incarcerated people and prison staff tends to overlook how culture and CSP mental health may shape prison dynamics. Finally, staff culture research tends to overlook the effects of stress and mental health in shaping cultural values, focusing instead on crafting theoretical frameworks. After reviewing this literature, we believe these siloed approaches reduce our ability to understand the factors causing poor CSP health. Further, we believe researchers cannot effectively understand the challenge of CSP health and wellbeing without considering how cultures exacerbate such problems (Higgins et al., 2024; Schoenfeld & Everly, 2022), and argue attempts to fix the serious issues underpinning poisonous cultures cannot be accomplished without accounting for the deep sense of threat and vulnerability that CSPs perceive in every part of their work (Ricciardelli et al., 2022a; Schultz, 2024).

Third, we argue new and innovative research methods are needed to study CSP health. Much of the research we cite here is based on secondary data or survey-based self-report quantitative analyses, focusing on specific moments in time. These studies have proven useful and have moved the field forward in distinctive ways. However, given we have a strong understanding of how problematic CSP health already is, we also believe it is time for researchers to move beyond descriptive snapshots of CSP health toward discussions of causation. We believe longitudinal, perhaps even clinical, research represents a next step in this area. For instance, an annual or biannual clinical assessment of CSP health—one administered by a clinician and designed to track and assess diagnosable rates of mental health disorders among the population—seems like a logical next step in determining what causal factors impacting prison work shape individual wellbeing over time.

In this vein, we note that a few longitudinal studies on CO health are beginning to emerge, which draw much more detailed pictures of CO stress (Ricciardelli et al., 2021). Recent research by Schwartz et al. (2024) is particularly notable, which definitively connects COs' exposure to violent traumatic events with worse mental health outcomes (see also Schwartz & Allen, 2024). Schwartz et al. draw a clear causal link between exposure to violence and long-term degradations in individual officers' mental health—something long theorized, and now conclusively supported (Ricciardelli et al., 2023a). Likewise, Ricciardelli et al.'s (2021) longitudinal work with Canadian federal COs and Frost et al.'s (Frost & Monteiro, 2020) case study examination of CO suicides provide detailed insight into determinants of health and well-being among prison staff, and how such factors may be associated with suicide decisions. In short, longitudinal studies successfully draw causal links to the stressors underpinning CO churn, PTSD diagnosis, and even suicidal ideation—significant issues with extremely meaningful implications for researchers and prison administrators (Lambert et al., 2005; O'Connell et al., 2024). While we realize research on these topics is complex, costly, and may not be feasible in all settings, we believe that longitudinal work dedicated to identifying the root causes of CSP health concerns is a crucial next step for this field going forward.

Fourth, we believe research on several obvious literature gaps is necessary. For instance, given 1980's-era accounts of how CSP work impacts relationship health (Cheek & Miller, 1983), we were surprised at the lack of updated research on this topic. Likewise, given historical accounts of substance use by CSPs as a means of self-medicating against work-related stress (Kauffman, 1988; Svenson et al., 1995), we were surprised at the relative paucity of new work on the topic, especially given the significant prevalence of PTSD symptoms and stress injuries among CSP populations (see Ricciardelli et al., 2024b; Taillieu et al., 2024 for partial exceptions). While there are inconsistent findings about whether CSPs are using substances such as marijuana and alcohol to deal with the stress of their work (Tallieu et al., 2024; Schultz, 2022), historical research suggests substance use is a long-standing problem (Kauffman, 1988; Svenson et al., 1995), and Frost et al.'s work specifically identifies addiction as something associated with CO suicide (Frost & Monteiro, 2021). Non-CSP research has drawn clear connections between substance use, self-medication, stress, and mental health challenges in other settings (Khantzian, 1997; Leeies et al., 2010). When contrasted to this,

the gaps in new research on CSP stress and substance use seem jarring. Given the health and security concerns that CSP substance use problems also may raise, research on this topic is warranted.

Fifth, we noted significant differences in the overall tenor of qualitative and quantitative research on CSP mental health. While quantitative research tends to measure the prevalence of specific mental health challenges, qualitative research provides important nuance highlighting how CSP wellbeing affects custodial and non-custodial correctional operations. Swartz and Higgins' work (Higgins et al., 2022, 2023, 2024; Swartz et al., 2017) is particularly notable here: designed to assess CO mental health in Kentucky, the qualitative focus group data they collected has led to dramatic insights into how COs draw on their perceptions of health and wellbeing to build new cultural frames, with significant impact on daily prison operations. This vein of work draws attention to the complex relationships between prison culture and CO health, something in need of closer examination. Such examinations are also necessary for other correctional occupations. Likewise, qualitative work seems particularly well-suited to understanding things like the link between mental health and job exit or turnover intent. Staff retention has developed into a major concern for correctional services worldwide (Lambert et al., 2005; O'Connell et al., 2024), yet research on the topic is still mixed. We stress correctional institutions can only ever be functional if they are appropriately staffed by a workforce with positive cultural values and appropriate training (Cassiano et al., 2022a; Perry & Ricciardelli, 2021; Tait, 2011). Even as academic discussions around punishment increasingly focus on reducing rates of incarceration and recidivism, overlooking the health and effectiveness of CSP in the immediate moment will only lead to violent and dysfunctional cultures with negative effects on everyone in the service.

However, we stress research on these topics must be appropriately nuanced. Abusive staff cultures which weaponize solidarity appear to be one of the largest threats to CSP wellbeing overall. Page's (2011) research, describing how CO unions in California engage in state politics to oppose prison reform efforts, is an example of how extreme these cultures can become. In some of our research, officers have suggested that other COs are the most stressful features of their work (Schultz, 2024; Stevens & Schultz, 2024)—even as these same individuals are framed as key sources of social support, who make prison work manageable (Cassiano & Ricciardelli, 2022; Isenhardt et al., 2019; Martin et al., 2012). Researchers attempting to draw sympathetic portraits of CSP health sometimes gloss over the complex cultural values CSPs may express. However, we believe understanding how these cultures influence CSP health is crucial and believe that drawing connections between staff social wellbeing and overall health is a key next step for developing the field of research. Without meaningful changes to prison occupational and organizational cultures, we believe long-term mental health solutions remain unlikely.

Practical and policy implications

The question remains: what can be done? Unfortunately, most CSP mental health programs tend to lack evaluation. Of the evaluations which exist, many lack control groups, a step necessary to determine program effectiveness (Konda et al., 2012; Ricciardelli et al., 2023c; Stelnicki et al., 2021). Thus, detailed and controlled evaluations of existing programs are necessary, as are new and innovative ways of incentivizing officer participation in such programs (Ricciardelli et al., 2022b). Mandatory annual physical and mental health assessments may also be a solution: (i) such assessments provide a baseline against which employees can note changes in their health quickly; (ii) routine assessments may help secure access to mental and physical health professionals, thus ensuring employees know who to call when they require support or intervention or simply have a concern; and (iii) routine assessments may help remove the mystique and even fear of seeing medical professionals, thereby challenging cultural barriers (Frost & Montero, 2020). Such mental health annual assessments are growing more common in policing and may be leading to cultural shifts around how police officers perceive mental health (Beckley et al., 2023). However, such programs still require careful evaluation, as it is unclear whether employees genuinely engage in these assessments or whether they lie to evaluators due to concerns about promotion and job security. Ongoing mental health training may play a role, as may ongoing efforts designed to wholistically improve CSP wellbeing—for instance, nutrition education sessions, gyms in prisons, lunch yoga, walks, or sports.

Conclusion

We view the broader health of CSPs working in custodial and non-custodial environments to be a crucial feature of prison operations globally. CSPs play a key role in every part of correctional operations, and their health and wellness shape the outcomes incarcerated people and parolees experience in meaningful ways (Garrihy, 2022; Ricciardelli et al., 2024a). While institutions and administrators have made strides toward addressing mental health, we believe the evidence around the topic demonstrates there is still much work to be done. Overall, we believe researchers have a necessary role in helping to develop these areas of study, as well as helping to implement, design, and evaluate meaningful health-related interventions going forward.

Supplementary Information

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Supplementary Material 1.

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