RELATIONAL LEADERSHIP STYLES, MENTAL HEALTH STAFF AND WORKPLACE OUTCOMES: A SYSTEMATIC LITERATURE REVIEW

AND

SERVANT LEADERSHIP AND PSYCHOLOGICAL WELL-BEING AMONG MENTAL HEALTH STAFF: THE MEDIATING ROLE OF WORK ENVIRONMENT

by

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Thesis Overview

This thesis examined the impact of relationally oriented leadership styles, within mental health contexts, to inform research and practice. Chapter one presents a systematic review of the research literature which aimed to explore associations between relationally oriented leadership styles: authentic, ethical, servant and transformational leadership, with mental health staff and workplace outcomes. The review findings indicated a gap in the research literature examining authentic, ethical, and servant leadership styles. The review concluded, there was a body of evidence highlighting the positive impact of transformational, and, to a lesser extent, servant leadership styles, on staff, working practices, and their workplaces. Recommendations were made for future research, to expand knowledge, and understanding of relationally oriented leadership styles, within mental health contexts, using diverse methodologies. Chapter two is an empirical research study, examining associations between servant leadership style, the work environment, and burnout and work engagement levels, among staff in secure mental health settings. The findings revealed, when staff perceive managers to exhibit qualities of a servant leadership style, this benefits staff well-being (burnout and work engagement) and the work environment. There was some evidence, indicating a servant leadership style influences the wellbeing of staff in a positive way, through the leader's impact on the work environment. The conclusions from this chapter, highlighted practice implications, in terms of training and developing healthcare workforces, and the need to generate further knowledge and understanding, with future research. A press release document is provided in Chapter three, for the public to access in a shortened format.

Dedications

For my hubby and best buddy Martin, you're 'awesome'

And

For my children Liam, Callum and Keryn, where this journey began, you inspire me!

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Chapter 1

Abstract

Leaders are essential to organisational functioning, staff performance, and for healthy staff and workplaces. There has been a longstanding interest in relational forms of leadership such as transformational leadership, and a growing interest in newer ones; authentic, ethical and servant leaders. Hoch et al. (2018) describes these as positive approaches to leadership, each bringing benefits to healthcare organisations. However, less is known about the impact of these leadership styles within diverse *mental* healthcare contexts. It is, therefore, crucial to review the literature to synthesise and evaluate current knowledge. A systematic literature review was undertaken to examine staff and workplace outcomes associated with authentic, ethical, servant and transformational leadership styles, within mental health services. Three electronic databases were searched in July 2020, resulting in eight studies which were included in this review. Quantitative and a mixed-method study, published in the English language were identified and reviewed where they examined associations between leadership styles, with staff and workplace outcomes, in mental health settings. Servant and transformational leadership styles revealed significant positive relationships with outcomes associated with staff, the workplace and working practices. There is a limited research base for newer forms of relational leadership styles, exploring outcomes within mental healthcare contexts. The findings from the review suggest support for relationally oriented leadership styles (servant and transformational) with a range of outcomes within mental health contexts. However, further research is required to develop knowledge in this area, including studies with diverse research designs, in a range of mental healthcare settings.

Introduction

Those delivering healthcare services are continually faced with meeting the needs of service users, within the constraints of organisational demands and processes in their workplaces (McHugh et al., 2011). While these competing demands can be managed, changes in demographics, increasing costs and difficulties retaining staff, create further challenges within healthcare systems (de Zulueta, 2015; Salmond & Echevarria, 2017). Ongoing expectations for new models of healthcare, together with economic constraints, have contributed to a focus on leadership which prioritises efficiency, with implications for the quality of healthcare provision (Cummings et al., 2018). Notably, within the UK, failures and poor care practices highlighted by the Francis Inquiry (2013) into the Mid Staffordshire NHS Foundation Trust, and, more recently, the Ockenden Report (2020) surrounding maternity care provision in the Shrewsbury and Telford Hospital NHS Trust, have highlighted problematic cultures with resultant calls for leadership change.

The challenges within healthcare services are exemplified by workforce shortages, and reports of overwhelmed and overstretched staff (de Zulueta, 2015; Greenberg et al., 2020; Salmond & Echevarria, 2017). More recently, the Covid-19 pandemic brought additional challenges to an already overstretched healthcare workforce, resulting in further pressures on healthcare staff and services (Greenberg et al., 2020). Internationally, there is a problem retaining mental healthcare staff, and, within the UK, concerns have been raised about staffing levels within forensic mental health settings in England, and the impact of high staff turnover on care provision (Oates et al., 2021). Given that these challenges have implications for staff and service quality, it is crucial to expand our understanding of ways to improve outcomes for staff and their workplaces within healthcare settings.

Within mental health care contexts, there also appears to be a pressing need to increase knowledge of factors which can exert a positive influence on staff, their workplaces and service provision, since staff working in these settings are particularly vulnerable to experiencing work related stress and burnout (Jenkins & Elliott, 2004; O'Connor et al., 2018*).* According to Newman et al. (2020), stress refers to the experience of emotional or mental tension, due to demanding circumstances. Whilst a certain amount of stress in a particular job role, for example, can increase motivation to achieve goals, stress that is prolonged or is not managed well, can have a negative impact on well-being, leading to burnout. Burnout refers to a state of mental, emotional, and physical exhaustion, whereby a person may feel overwhelmed, and/or unable to meet demands expected of them (Newman et al., 2020). In contrast, well-being has been described as an intrinsic state of happiness, life satisfaction, sense of connectedness, and pleasant cognitive and emotional experiences in relation to a person's life (Nelson et al., 2014).

Forensic mental health settings are even more demanding due to the nature of the working context, requiring staff to manage ongoing risk of violence, and supporting individuals presenting with complex trauma and forensic risk histories. This is thought to place staff at increased risk of vicarious trauma and stress (Sodeke-Gregson et al., 2013), and is noteworthy, given the links between burnout among staff and higher staff turnover (West et al., 2017).

Some of the challenges facing staff working within general and mental healthcare systems have been outlined, and the need to explore factors which might contribute to improving outcomes within these complex settings. According to the literature, leadership is one of the most important determinants for a wide range of staff and workplace outcomes, across both public and private organisations (Eva et al., 2019), including, healthcare settings

(Cummings et al., 2018; Nelson et al., 2014). According to McHugh et al. (2011), leaders are crucial in fostering healthy work environments, and, within the healthcare literature, leadership style has been linked with a range of outcomes, including staff satisfaction with their work, emotional well-being and (conversely) burnout, turnover among staff, the culture of the work environment, and medical errors (Alilyyani et al., 2018; Cummings et al., 2010, 2018; Wong et., 2013).

Within *mental* healthcare contexts, leadership has been shown to exert a moderating effect on levels of stress and burnout experienced by staff (O'Connor et al., 2018). In comparison to the general healthcare literature, however, there is a dearth of studies examining leadership and outcomes within diverse mental healthcare contexts. Within *secure* mental health settings, this gap in knowledge is even more apparent, despite the notable high levels of burnout and turnover rates reported for staff in these settings (Oates et al., 2021; Oddie et al., 2007). Additionally, as Newman et al. (2020) points out, the nature of forensic mental healthcare environments are particularly stressful, involving exposure to highly distressing material, including risk of self-harm and violence. This suggests secure mental health services bring unique challenges for staff, their workplaces and service users (Oates et al., 2021). Given that leadership is known to play a vital role in terms of influencing outcomes associated with healthcare staff, their workplaces, and service provision (Alilyyani et al., 2018; Cummings et al., 2010, 2018; Eva et al., 2019; Wong et al., 2013), the need to understand what constitutes 'effective' leadership across diverse healthcare settings and mental healthcare settings, is great.

According to West et al. (2017), 'effective' leaders within healthcare services are those who emphasise a high degree of care quality. Despite this assertion, some argue that leadership is not well understood (Kjellstrom et al., 2020). Furthermore, the debate regarding

what constitutes ‘effective’ leadership within healthcare organisations, appears to be ongoing (Cummings et al., 2018). Northouse (2007) defined leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (p. 3). However, attempts to define leadership, as a global construct, has been described as pointless (Antonakis & Day, 2018). These positions, suggest something of a paradox: on the one hand, the literature points to the crucial role of leadership in contributing positively to organisations, and yet there also remains difficulty in (or resistance towards) defining and explaining what ‘effective’ leadership is.

Within the general leadership literature, leadership theories have been categorised as ‘traditional’ for those published up to the 1970’s and ‘newer’ for those coming later (Hoch et al., 2018), with traditional approaches suggested to reflect power flowing from the ‘top down’ (Neubert et al., 2016). Within the healthcare literature, studies have also classified leadership as either relationship-focussed or task-focussed, depending on the extent to which the leader is focussed on people or tasks (Cummings et al., 2018). Relationally oriented leadership styles focus on relationships, focus on shared goals, offer support, and take an interest in the welfare of others (Cummings et al., 2010). In contrast, task-focussed leadership is transactional, providing rewards in exchange for compliance and the completion of tasks (Bass & Avolio, 1994). According to Brower et al. (2000) forms of leadership which prioritise people and relationships, can effect positive change. The positive aspect of leadership styles which are relationally focussed is also outlined by Hoch et al. (2018) who documents a growing interest in newer forms of leadership styles.

According to Hoch et al. (2018), transformational leadership is one of the most well-researched positive leadership approaches, and one, which prioritises relationships over tasks (Cummings et al., 2018; Wong et al., 2013). Transformational leaders are said to inspire

others, prioritise the needs of others, and foster ethical behaviours in 'followers' (Burns, 1978). In addition to transformational leadership, Hoch et al. (2018) discuss three emerging forms of leadership styles which are described as ethically and morally value-based: authentic, ethical and servant leadership. A meta-analysis, undertaken by Hoch et al. (2018), outlined how transformational leadership and the three newer forms of leadership styles share several similarities, including their moral and ethical emphasis.

Within the literature, authentic, ethical and servant leadership have also been classified as relationally oriented leadership styles, which means they are focussed on relationships (Alilyyani et al., 2018; Cummings et al., 2018; Hoch et al., 2018). Authentic leaders have been described as self-aware, interested in the values of others, and prioritise ongoing development in both themselves and followers (Avolio et al., 2004). Ethical leaders are said to encourage two-way communication, prioritise the needs of others, demonstrate integrity, and conduct themselves ethically (Brown at al., 2005). Servant leadership has been defined as a style of leadership which also prioritises the needs of others. Servant leaders convey empathy and demonstrate a clear commitment to the well-being and development of others (Greenleaf, 1977).

According to van Dierendonck (2011, 2013), for leaders to influence and promote employee well-being and positive workplace outcomes, the leader's own approach needs to be underpinned by ethical and caring qualities. This is an important frame of reference, since Hoch et al. (2018) purports that transformational, authentic, ethical and servant leadership styles, all reflect ethical and caring characteristics. If van Dierendonck's (2011) position is correct, this would indicate that these four relational leadership styles are likely to promote staff well-being and healthier work environments.

Additionally, all four leadership styles share a focus on the needs and development of others, which are important qualities when considering that the professional development of staff has been linked with improved staff well-being (Niinihuhta & Häggman-Laitila, 2022). Furthermore, West et al. (2017) assert that 'effective' NHS leaders need to promote ongoing learning and development, and recommendations following the Mid Staffordshire investigations, also highlighted the need for staff development (de Zulueta, 2015).

According to West et al. (2017) leaders communicate through what they do, a viewpoint which aligns with the social learning paradigm (Bandura, 1977). If, as Hoch et al. (2018) assert, authentic, ethical, servant and transformational leadership styles all share ethical and caring qualities, which promote positive outcomes for organisations (Selladurai, 2014; van Dierendonck, 2011, 2013), then they could be expected to create a positive influence on staff and the workplace through the role modelling of these qualities. Furthermore, given healthcare workplaces focus on providing support and care for others, these settings provide even more opportunities for staff to emulate leaders' ethical and moral behaviours towards others (de Zulueta, 2015).

Research undertaken within healthcare settings has demonstrated a range of positive outcomes associated with the four relationally-focussed leadership styles; staff satisfaction, staff turnover, absenteeism, and staff well-being (Alilyyani et al., 2018; Cummings et al., 2018; Kaffashpoor et al., 2020; Niinihuhta & Häggman-Laitila, 2022; Wong et al., 2013), and with organisational culture, community, worklife characteristics and structure (Barkhordari-Sharifabad., 2021; Breevhart et al., 2014; Cummings et al., 2018; Laschinger at al., 2015; Nelson et al., 2014; Wong et al., 2013). In addition, relationship focussed leadership styles have been associated with fewer medical errors being made within healthcare settings (Wong et al., 2013).

In a review undertaken by Cummings et al. (2018), the overall findings were that leaders who prioritised relationships over tasks were associated with positive staff and workplace outcomes. However, the review also identified that there were some similarities in outcomes for both the task-focussed and relationally oriented leadership styles with regard to emotional exhaustion levels among staff. In another study, ethical leadership within university settings was associated with poor well-being (Yang, 2014). These findings suggest that different leadership styles may exert an influence differently depending upon a range of factors, including the specific context. This is something which aligns with John and Joseph's (2009) suggestion that what is 'effective' leadership is specific to a particular organisation. It appears crucial, therefore, to explore and expand the leadership literature across diverse contexts, and not to assume 'one size fits all.'

The healthcare literature points to the benefits of leadership styles which are focussed on people, showing promising results for authentic, ethical, servant and transformational leadership styles (Alilyyani et al., 2018; Barkhordari-Sharifabad et al., 2018; Bobbio et al., 2012; Cummings et al., 2010, 2018; Laschinger et al., 2015; Nelson et al., 2014; Neubert et al., 2016; Wong et al., 2013). However, there is little research of these leadership styles within *mental* healthcare contexts, and, in particular, *forensic mental* health settings. This is noteworthy, since leadership styles prioritising relationships are said to play a role in moderating experiences of stress experienced by mental health staff (O'Connor et al., 2018).

Furthermore, the research which has been undertaken has tended to focus on nursing staff groups and may not transfer to other multi-disciplinary staff. Multi-disciplinary teams are characteristic of mental health settings, therefore, the research needs expanding to include a wider staff group (Alilyyani et al., 2018). Earlier reviews undertaken form part of the backdrop for this review (Alilyyani et al., 2018; Cummings et al., 2018; Wong et al., 2013).

These reviews have included outcomes associated with authentic, servant, and transformational leadership. None, however, included the ethical leadership style and none have focussed on undertaking the research in mental healthcare settings.

Leadership does not operate within a vacuum (Neubert et al., 2016), and, therefore, the nature of work environments and the particular role and responsibilities of staff are important to consider, in developing an understanding of how different leadership styles contribute to staff and workplace outcomes. This is also an important consideration since many mental health services employ multi-disciplinary teams. Furthermore, given the additional complexities and challenges noted within mental healthcare settings (Oates et al., 2021), it is crucial to expand upon the literature base to include diverse mental health settings and staff.

The aim of this review, therefore, is to clarify what staff and workplace outcomes are associated with authentic, ethical, servant and transformational leadership styles within mental health settings. Specifically, the research evidence has been reviewed against the following question:

- What is the impact of relational leadership styles, authentic, ethical, servant and transformational, on staff and workplace outcomes in mental health settings?

Methodology

Literature Search

To identify empirical research studies related to four styles of leadership (authentic, ethical, servant, and transformational) and staff and workplace outcomes, a systematic search of three electronic databases was undertaken.

Data Sources and Search Strategy

A search of the three electronic databases, PsycINFO, CINAHL PLUS and Web of Science, was carried out on 28th July 2020. The databases selected included literature from the disciplines of psychology, social sciences, and medicine and were considered most relevant to the aims of the review. No timeframes were specified for searches; therefore, the full breadth of available literature was searched for each database (i.e., from 1937 for CINAHL PLUS, from 1943 for Web of Science, and from 1967 for PsycINFO). Targeted, controlled vocabulary terms and free text search terms relating to the four leadership styles (authentic, ethical, servant and transformational leadership), staff working within mental health contexts, and staff and workplace outcomes were applied to the three databases. The term ‘relational’ was included alongside the four specific leadership styles to include studies which may have grouped one or more of the four leadership styles under this broader heading. For actual search terms used see Table 1.

Table 1

Literature search terms included in the review

Construct	Leadership Style	Mental Health Staff	Outcomes
Search Terms	'relational*' 'servant' 'ethical' 'authentic' 'transformational' **AND** 'leader*'	'mental health' 'forensic' 'inpatient' psychiatric hospital' 'psychiatric department' 'occupational therapist' 'social worker' 'nurse' 'psychiatric staff' 'psychiatric personnel' 'counsellor' 'psychiatrist' 'psychologist'	'outcome*' 'influence*' 'result*' 'effect*' 'relations*' 'consequence*' 'impact*' 'correlat*'

Note: Search terms for each construct were combined with *OR* and results from each construct combined with *AND.*

Selection Criteria

The searches yielded a total of 2619 results, which reduced to 2181 when duplicates were removed, inclusion and exclusion criteria were then applied. To be included in the review, papers were selected using an adapted version of the SPIO framework: Study Design, Participants, Interventions and Outcomes, used in earlier reviews (Robertson et al., 2015). The 'intervention' component was not included as the aim was not to look for intervention studies. Studies had to include staff working in mental health settings in their sample, and report outcomes in those settings that were associated with at least one or more of the following leadership styles (authentic, ethical, servant, transformational)**.** Quantitative and mixed methods studies were included providing the study included a quantitative analyses

component, to facilitate comparison with earlier quantitative reviews. Only papers published in peer reviewed journal articles and written in English were included. For the full inclusion and exclusion criteria applied (see Table 2).

Table 2.

SPIO inclusion and exclusion criteria.

SPIO	Inclusion	Exclusion
Study Design	• Empirical research • Peer reviewed journal articles • Quantitative and mixed methods (includes quantitative analysis) • Examines leadership style (authentic, ethical, servant, transformational) with staff/workplace outcomes	• Dissertations • Books or chapters • Grey literature • Qualitative studies, mixed methods (without quantitative analyses). • Does not examine a leadership style (authentic, ethical, servant, transformational), with staff /workplace outcomes • Not written in English
Participants, including organisation	• Staff rating/answering questions about their managers/supervisors on either one or more leadership style (authentic, ethical, servant, transformational) within mental health contexts • Includes only mental health related settings • Private and public mental health settings	• Does not include (authentic, ethical, servant, transformational) leader within mental health contexts • Includes non-mental health related settings
Outcomes	• Staff outcomes or workplace outcomes	• Did not focus on outcomes associated with staff and the workplace

After applying the inclusion and exclusion criteria, 2160 articles were excluded, and 21 papers remained. The full-text articles for each of the 21 remaining studies were then reviewed by the researcher and a further 9 papers were removed due to not meeting the inclusion/meeting the exclusion criteria. On further inspection, these 12 papers reported on eight studies.

Potential areas of overlap were identified for six papers with regards to the samples, therefore the corresponding authors (n = 2) were contacted to establish any overlapping elements in the studies. It was established that the papers by Aarons (2006) and Green et al. (2014a, 2014b) are all linked to a wider study undertaken by Aarons (2004). These studies included the same sample but with different measures. Furthermore, Brimhall et al. (2016), Fenwick et al. (2019) and Green et al. (2013) are all linked to a larger scale development project carried out by Aarons et al. (2012). These three studies also drew upon the same sample but included different measures.

Li et al. (2021) recommended that where there are multiple reports of the same study, they should be identified and linked together either before or after the data extraction process. The six papers with overlapping samples were therefore identified and linked together. Due to the different aims and methods used, they were evaluated for quality analysis as individual papers, and then linked together as part of two wider studies for the purpose of this review. For ease of reference, they are presented in italics (see Table 3) and in subsequent tables.

Table 3

Full text articles included in review

Author's name/year	Title of article
1a. Aarons, G. A. (2006)	Transformational and transactional leadership: association with attitudes toward evidence-based practice.
1b. Green, A. E., Albanese, B. J., Shapiro, N. M., & Aarons, G. A. (2014a)	The roles of individual and organizational factors in burnout among community-based mental health service providers.
1c. Green, A. E., Albanese, B. J., Cafri, G., & Aarons, G. A. (2014b)	Leadership, organizational climate, and working alliance in a children's metal health service system.
2. Aarons, A., Sommerfield, D. H., & Willging, C. E. (2011)	The soft underbelly of system change: the role of leadership and organizational climate in turnover during state-wide behavioral health reform.
3. Aarons, G. A., Ehrhart, G. E., Farahnak, L. R., Sklar, M., & Horowitz, J. (2017)	Discrepancies in leader and follower rating of transformational leadership: relationship with organisational culture in mental health.
4a. Brimhall, K. C., Fenwick, K., Farahnak, L. R., Hurlburt, M. S., Roesch, S. C., & Aarons, G. A. (2016)	Leadership, organizational climate, and perceived burden of evidence-based practice in mental health services.
4b. Fenwick, K. M., Brimhall, K. C., Hurlburt, M., & Aarons, G. (2019)	Who wants feedback? Effects of transformational leadership and leader-member exchange on mental health practitioners' attitudes toward feedback.
4c. Green, A. E., Miller, E. A., & Aarons, G. A. (2013)	Transformational leadership moderates the relationship between emotional exhaustion and turnover intention among community mental health providers.
5. Corrigan, P. W., Diwan, S., Campion, J., & Rashid, F. (2002)	Transformational leadership and the mental health team.
6. der Kinderen, S., Valk, Khapova, S., & Tims, M. (2020)	Facilitating eudemonic well-being in mental health care organizations: the role of servant leadership and workplace civility climate.

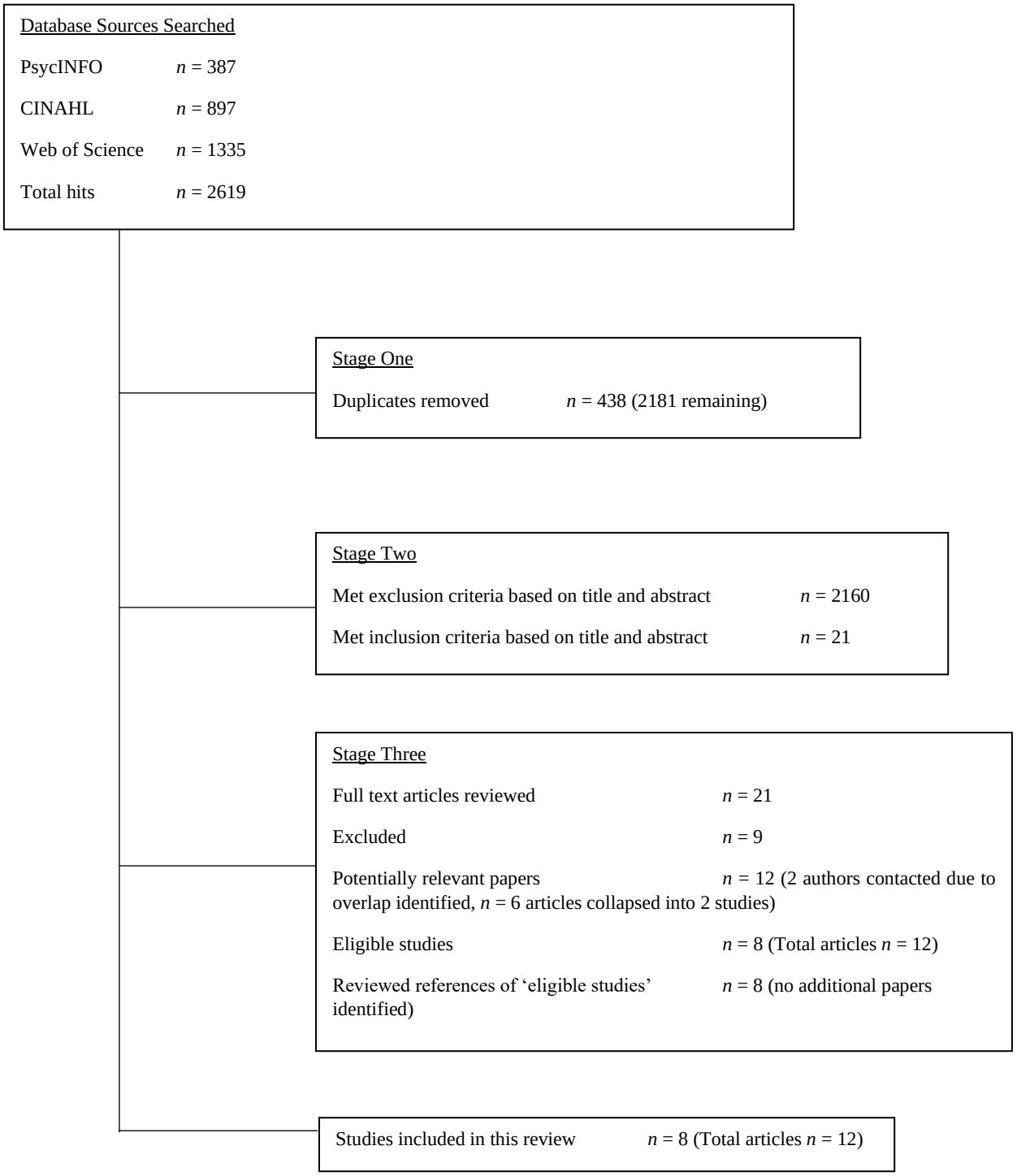
7. Farahnak, L., Ehrhart, M., Torres, E., & Aarons, G. (2019)	The influence of transformational leadership and leader attitudes on subordinate attitudes and implementation success.
8. Madathil, R., Heck, N. C., & Schuldberg, D. (2014).	Burnout in psychiatric nursing: examining the interplay of autonomy, leadership style, and depressive symptoms.

Note: Studies in italics represent six papers reporting on two studies

Therefore, the present systematic review is conducted on eight studies representing 12 articles which focussed on outcomes associated with at least one of the following leadership styles (Authentic, Ethical, Servant, Transformational), within mental health contexts. For a summary of the study selection and retrieval process (see Figure 1).

Figure 1

Summary of study selection and retrieval process



Data Extraction

Following full-text screening, data were extracted for each study. This included information on the author, year and country of study, study purpose and design, sample characteristics and setting, leadership style and outcome measures, analysis, and findings.

Quality Assessment

Following data extraction, a quality assessment was undertaken using the Mixed Method Appraisal Tool (MMAT; Hong et al., 2018) for each of the 12 papers to assess their methodological quality and risk of bias. The MMAT, designed to overcome some of the challenges associated with appraising diverse designs, was chosen for the present review due to the inclusion of a mixed method paper: the remaining papers were quantitative designs. The MMAT has been used in previous systematic reviews (Hlongwa et al., 2019, 2020; Souto et al., 2015).

Having determined that each paper being assessed is an empirical study (assessed via two initial screening questions), the reviewer is required to determine the appropriate category of study design and subsequently rate the study across a range of items to determine if specific criteria have been met. There are three potential responses of 'Yes', 'No' or 'Can't tell' from which reviewers can select. Two categories of designs were present in the review therefore the respective questions under these two categories were used to evaluate quality: mixed methods (n = 1), and quantitative descriptive (n = 7).

Analysis

Following data extraction, descriptive and narrative syntheses were undertaken to examine the data. Descriptive synthesis focussed on the study aims and design, participant characteristics and settings, leadership style and measurement, outcomes and instruments used, and the analyses employed. A narrative synthesis was then undertaken to explore themes within and between the studies in terms of the findings, and the quality of the studies.

Results

Descriptive Synthesis

All studies were published within the last 18 years (i.e., 2002-2020) in peer-reviewed journal articles.

Research Aims

All studies examined relationships with transformational (n = 7) or servant leadership style (n = 1), and a range of outcomes relating to staff, and the workplace. Studies explored relationships between leadership style with staff well-being (der Kinderen et al., 2020), with burnout (Corrigan et al., 2002; Green et al., 2014a; Madathil et al., 2014), emotional exhaustion (Green et al., 2013), and with depressive symptoms (Madathil et al., 2014). Relationships were also examined with staff turnover (Aarons et al., 2011; Green et al., 2013), and work engagement (der Kinderen et al., 2020). In terms of work-related performance, der Kinderen et al. (2020) also examined leadership style with task performance, and innovative behaviour among staff.

Several studies explored associations between leadership styles with aspects of the working environment, including, organisational culture (Aarons et al., 2017; Corrigan et al., 2002), workplace climate (Aarons et al., 2011; Brimhall et al., 2016; der Kinderen et al., 2020; Green et al., 2014a, 2014b), and work autonomy (Madathil et al., 2014). Others explored leadership styles with aspects of service provision, including attitudes towards and/or the implementation of evidence-based practice (EBP), (Aarons, 2006; Brimhall et al., 2016; Farahnak et al., 2019; Fenwick et al., 2019), and with working alliance (Green et al., 2014b).

As well as direct effects, studies also examined indirect relationships associated with leadership style. One overarching study sought to explore leadership style with the following: staff attitudes towards feedback through the quality of the supervisor-practitioner relationship, leadership style with perceived burden of EBP through organisational climate, and the moderating role of leadership between emotional exhaustion and turnover intention among staff (Brimhall et al., 2016; Fenwick et al., 2019; Green et al., 2013). In der Kinderen et al. (2020), the aim was to examine the indirect effect of leadership style on staff well-being, through the leaders' impact on the work environment. Additionally, Faranhak et al. (2019) explored indirect relationships between leadership style with the successful implementation of EBP, and staff attitudes towards EBP, while Madathil et al. (2014) examined indirect associations between leadership style, work autonomy, and psychological distress.

Study Designs

Apart from one mixed method study by Aarons et al. (2011), the remainder were quantitative survey designs (*n*=7).

Participant Characteristics and Settings

Except for der Kinderen et al. (2020), undertaken in the Netherlands, the remainder of the research studies took place in the USA. The largest sample size reported across all the studies included 620 participants (Corrigan et al., 2002), with the smallest sample including 89 participants (Madathil et al., 2014). Not all studies provided detailed demographic information for participants' age, gender, or professional group. Studies which did provide this information reported an age range of 20 years to 72 years across the studies. However, information on age was missing from two of the studies (Aarons et al., 2017; Madathil et al., 2014). Across the studies that reported participant gender (n = 8), there was a lower

proportion of male to female participants, with the lowest male to female ratio of 3:22 (Madathil et al., 2014).

Studies providing information on the profession of participants included the following staff in their samples: nurses, therapists, social workers, psychologists, psychiatrists, substance use workers, criminal justice and education staff, case managers, rehabilitation and support workers, child development workers and human resource staff. One study consisting of three papers did not provide a breakdown of the professional background of staff (Brimhall et al., 2016; Fenwick et al., 2019; Green et al., 2013). Two further studies, including Farahnak et al. (2019) and der Kinderen et al. (2020), also omitted to provide a detailed breakdown of participants' professions.

Several studies provided information on the nature of service contexts, in terms of whether they were adult and/or children's services, including the two wider studies, and both Aarons et al. (2011) and Madathil et al. (2014). Several studies, however, did not provide this information (n = 4). Additionally, studies which reported on mental health settings, included the following settings: outpatient, community, case management, wraparound, inpatient, residential, substance use, forensic and rehabilitative. Three studies did not provide this information.

Leadership Style Measures

Most of the studies (n = 7) measured transformational leadership style using a version of the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1993, 1995, 2004). The only study to include a servant leadership style, assessed this with the shortened Servant Leadership Questionnaire (SLQ; Liden et al., 2008), (der Kinderen et al., 2020).

Outcomes Assessed

Staff Well-Being, Turnover and Work Engagement. Studies which explored outcomes related to staff health and well-being, included well-being measured using the Eudemonic Well-Being (EWB; Ryff, 1989) tool, and burnout, using The Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach & Jackson, 1986), (Corrigan et al., 2002; Madathil et al., 2014). In one study burnout was assessed using subscales: emotional exhaustion, depersonalisation, personal accomplishment, from the Organizational Social Context measure (OSC; Glisson et al., 2008), (Green et al., 2014a). Emotional exhaustion was assessed using the emotional exhaustion subscale of the Children's Service Survey (CSS; Glisson & James, 2002), (Green et al., 2013), while depressive symptoms were assessed with the Brief Symptom Inventory (BSI; Derogatis, 1975), (Madathil et al., 2014).

Intention among staff to leave was examined in two studies, both citing using five items derived from organisational studies (Knudsen et al., 2003; Walsh et al., 1985), (Aarons et al., 2011; Green et al., 2013). Aarons et al. (2011) assessed voluntary turnover amongst staff using semi-structured follow-up interviews. Work engagement was assessed using the Ultra-Short Measure for Work Engagement (UWES; Schaufeli et al., 2017), (der Kinderen et al., 2020).

Work Related Practice and Performance. Some studies explored staff views about the nature of their working practice using the Attitudes Towards Evidence Based Practice Scale (EBPAS; Aarons, 2004), (Aarons et al., 2006; Brimhall et al., 2016; Faranhak et al., 2019). The success of implementing EBP was assessed using a scale developed for the study, as the authors cited being unable to identify a general measure. This was subsequently defined in terms of the use of EBP at the time of data collection (Farahnak et al., 2019). A further study used the EBPAS to assess staff views about receiving feedback (Fenwick et al., 2019). In this same study, the relationship between leader – practitioner, was assessed using the

Leader Member Exchange tool (LMX; Scandura & Graen, 1984), as a potential mechanism to explain the relationship between leadership style, and perceptions of receiving feedback. The Working Alliance Inventory (WAI; Tracey & Kokotovic, 1989), was included in a further study to assess staff views about the working alliance (Green et al., 2014b).

Studies also included an assessment of work-related behaviour. These included measures of task performance, measured with the Individual Work Performance Scale (IWP; Koopmans et al., 2014), and work behaviour, measured using the Innovative Work Behaviour scale (IWB; De Jong & Hartog, 2010) (der Kinderen et al., 2020).

Working Environment. Outcomes associated with the workplace environment were also assessed and included measures of work climate, assessed with the Civility Norms Questionnaire – Brief (CNQ-B; Walsh et al., 2012), (der Kinderen et al., 2020), and the Organizational Social Context (OSC; Glisson et al., 2008), (Green et al., 2014a). The Children's Service Survey (CSS; Glisson & James, 2002) was used to measure workplace climate (Aarons et al., 2011; Brimhall et al., 2016; Green et al., 2014b). The CSS was also used in another study to examine organisational culture (Aarons et al., 2017). One of the studies included the Organisational Description Questionnaire (ODQ; Bass & Avolio, 1993) to assess workplace culture (Corrigan et al., 2002). Madathil et al. (2014) assessed work role autonomy using the Nursing Work Index—Revised (NWI-R; Aiken & Patrician, 2000).

Analyses

Correlation and regression analyses models were commonly used across the studies, with one also including a one-way ANOVA (Corrigan et al., 2002).

In the one mixed method study, regression analyses were employed, along with semi-structured interviews assessing voluntary turnover among staff (Aarons et al., 2011). For a summary of characteristics of the data extracted see Table 4.

Table 4.

Characteristics of the included studies

Author and year	Study purpose	Study design	Sample and setting characteristics	Leadership style/measure	Outcomes assessed	Analysis and findings
1a. Aarons (2006), USA	Examine relationships between Transformational (TL) and transactional leadership with attitudes towards EBP	Quantitative (survey)	*N* = 303 Response Rate (RR) 96% Male (M)=23% Female (F) =77% Age: 25-46 years (*M* = 35.7) Profession: Family therapist (FT), 34%; social worker (SW), 33%; psychologist, 21%; psychiatrist, 2%; other (e.g., drug/ criminology/ educational staff), 10%	TL (MLQ)	EBPAS (assessed attitudes towards EBP)	Zero order correlations and multilevel regression TL was associated with positive attitudes towards EBP, and TL was negatively associated with perceived differences between current practice and EBP.

			Setting: Child and adolescent services (CAMHS) (includes outpatient, community, case management, wraparound, and inpatient)			
1b. Green et al. (2014a), USA	Explore the roles of individual and organisational factors in staff burnout	Quantitative (survey)	*N* = 322 RR: 96% M = 24% F= 76% Age: (*M* = 35.7) years Profession: FT, 38%; SW, 37%; psychologists, 25% Setting: CAMHS (includes outpatient, community, case management, wraparound, and inpatient)	TL (MLQ)	OSC (assessed organisational climate and burnout)	Pearson zero order correlations Multilevel hierarchical linear regression Higher TL associated with lower levels of staff burnout

1c. Green et al. (2014b), USA	Explore associations between TL and organisational climate with working alliance	Quantitative (survey)	*N* = 322 RR: 96% M = 24% F= 76% Age:(*M* = 35.7) years Profession: FT, 38%; SW, 37%; psychologists, 25% Setting: CAMHS (includes outpatient, community, case management, wraparound, and inpatient)	TL (MLQ)	CSS (assessed organisational climate) WAI (assessed working alliance)	Multilevel structural equation modelling TL positively associated with organisational climate which in turn was linked to higher levels of working alliance
2. Aarons et al. (2011), USA	Examine leader style with organisational climate, staff	(Mixed Method)	*N*=190 RR: Not reported (NR)	TL (MLQ)	CSS (assessed empowering/demoralising climate)	Structural equation modelling and follow up interviews

	turnover intention, and voluntary turnover		M=75% F=24% Age: (*M* = 45) years Profession: Psychiatrists, psychologists, social workers, case managers, counsellors, psychosocial rehab workers, support staff Setting: includes adult and children's (residential, outpatient, substance use services)		TI (assessed turnover intention) VT (assessed voluntary turnover using semi structured interviews)	TL had a strong positive association with empowering climate. TL was also negatively associated with demoralising organisational (however this was only moderated by TL under high stress conditions)
3. Aarons et al. (2017), USA	Explore leader – follower discrepancies and associations with organisational culture	Quantitative (survey)	N = 276 RR: 89% Gender: NR Age: NR	TL (MLQ)	CSS (assessed organisational culture)	Polynomial regression and response surface analysis Discrepancies between clinician and supervisor ratings on TL were

			Profession: Psychology, Therapists, SW's, child development staff. Setting: Mental health clinics			associated with a more negative organisational culture Organisational culture was rated less positively when leaders rated themselves higher on TL than followers.
4a. Brimhall et al. (2016), USA	Explore relationships between TL with organisational climate, and perceived burden of using EBP	Quantitative (survey)	*N* = 363 RR: 98.9% M= 19% F= 81% Age: 26-46 years (*M* = 36) Time in service: (*M* = 2.5) years Profession: Profession: Student,	TL (MLQ)	CSS (assessed organisational climate) EBPAS-50 (assessed perceived burden of (EBP)	Multilevel path analysis to explore direct and indirect effects Indirect associations were found between TL and perceived burden of EBP via organisational climate

			registered intern, licensed provider, unlicensed provider, other Setting: Child and adolescent outpatient settings			
4b. Fenwick et al. (2019), USA	Explore mechanisms through which leadership style influences attitudes towards feedback from supervisors	Quantitative (survey)	*N* = 363 RR: 99% M= 19% F= 81% Age: 26-46 years (*M* = 36) Time in service: (*M* = 2.5) years Profession: Student, registered intern, licensed provider, unlicensed provider, other	TL (MLQ)	LMX (assessed quality of supervisor – practitioner relationship) EBPAS (assessed staff attitudes towards feedback)	Multilevel path analysis TL indirectly associated with attitudes towards feedback via the quality of the supervisor-practitioner relationship

			Setting: Child and adolescent mental health services			
4c. Green et al. (2013), USA	Explore relationships between TL, emotional exhaustion, and turnover intention	Quantitative (survey)	*N* = 388 RR: 98.9% M= 19% F= 81% Age: 26-46 years (*M* = 36) Profession: Community mental health providers Setting: Child and adolescent mental health services	TL (MLQ)	CSS (subscale assessed emotional exhaustion (EE) TI (turnover intention assessed with 5 questions derived from organisational studies)	Pearson correlation analyses Moderated regression analyses TL had a negative association with EE and TI. TL moderated the relationship between EE and TI
5. Corrigan et al. (2002), USA	Examine TL, transactional and laissez - faire styles of leadership with organisational	Quantitative (survey)	*N* = 620 RR: 70% M=29% F=71%	TL (MLQ)	ODQ (assessed organisational culture) MBI (assessed burnout)	Correlational analyses One-way ANOVA

	culture and burnout		Age: (*M* = 41) years Profession: Nurses/aides, 66.5%: psychologists/SW, 31.2%; other, 3.2% Setting: Community and hospital mental health services			Staff reports of TL was associated with lower levels of burnout and a more positive organisational culture
6.der Kinderen et al. (2020), Netherlands	Explore role of servant leadership (SL) with staff well-being, task performance, innovative work behaviour, work engagement, and workplace civility climate	Quantitative (survey)	*N* = 312 RR: 26% M=28% F=72% Age: Male (*M* = 50) years, Female (*M* = 45) years Profession: Clinical and non-clinical facing employees	SL (Shortened SL scale)	EWB (assessed staff well-being) CNQ-B (assessed workplace civility climate (WPCC)) UWES (assessed work engagement) IWP (assessed task performance) IWB scale (assessed Innovative work behaviour).	Correlation analyses Regression analyses using PROCESS macros, moderation models SL was positively associated with EWB, and SL positive interaction effects with WPCC SL was positively associated with all

			Setting: Mental healthcare institutions Time in service: (0.50 to 54) years			workplace outcomes, partially through EWB, with the relationship varying across WPCC SL had a stronger relationship with EWB when WPCC was high
7. Farahnak et al. (2019), USA	Examine associations between TL, staff attitudes towards EBP and implementation success of EBP	Quantitative (survey)	*N* = 565 RR: 82.2% M=24% F=76% Age: 20-72 years (*M* = 38.5) Profession: Mental health practitioners Setting: Mental health organisations	TL (MLQ)	EBPAS (assessed attitudes towards EBP) IS (assessed implementation success of EBP)	Correlations and multilevel modelling. TL was indirectly associated with implementation success of EBP through staff attitudes towards EBP

8. Madathil et al. (2014), USA	Explored relationships between leadership style, work role autonomy and psychological distress TL mediating role on depressive symptoms and burnout	(Quantitative Survey)	N = 89 RR:NR M = 22% F = 88% Age: NR Profession: Nurses Setting: Adult 48% forensic 13%, child, 12% rehabilitation 12%, Other 25%	TL (MLQ)	MBI – HSS (assessed burnout) NWI-R (assessed work autonomy) BSI (assessed depressive symptoms)	Bi-variate correlation, hierarchical regression, bootstrapping analyses. TL mediates the relationship between depressive symptoms and burnout in nurses.

Note: Studies in italics represent six papers reporting on two studies

Narrative Synthesis

Analyses of results from the studies included in this review revealed that only two out of the four relational leadership styles were examined (Transformational and Servant), with a range of staff and workplace outcomes. Only one study explored servant leadership style (der Kinderen et al., 2020), while the remainder examined transformational leadership. None of the studies included either authentic or ethical leadership, which aligns with Hoch et al. (2018), assertion regarding the relative popularity of transformational leadership in comparison to the newer styles of leadership.

There were several themes identified across the studies in terms of the outcomes associated with these two relationally oriented leadership styles. These findings, generally, support earlier reviews in terms of highlighting the positive impact of servant and transformational leadership styles on outcomes within healthcare organisations (Cummings et al., 2018; Wong et al., 2013).

Impact of Leadership Style on Staff Outcomes

Both transformational and servant leadership styles revealed significant positive relationships with a range of staff and workplace outcomes. Transformational leadership was associated with lower burnout levels among staff (Corrigan et al., 2002; Green at al., 2014a; Madathil et al., 2014), and lower levels of emotional exhaustion (Green et al., 2013). Furthermore, a transformational leadership style was shown to moderate the relationship between emotional exhaustion and staff intention to leave (Green et al., 2013). Similarly, a servant leadership style was shown to promote staff well-being and work engagement (der Kinderen et al., 2020). Both studies, which examined the impact of transformational leadership style on staff turnover and/or intention to leave revealed significant negative

relationships between the leadership style and these outcomes (Aarons et al., 2011; Green et al., 2013).

Impact of Leadership Style on Work related Practices and Performance

Other studies which examined transformational and servant leadership styles with work-related practices showed similar promising findings. Transformational leadership was shown to have a positive impact on staff attitudes towards working practices and the successful implementation of new models of practice (Aarons et al., 2006; Brimhall et al., 2016; Farahnak et al., 2019; Fenwick et al., 2019). Farahnak et al. (2019) highlighted indirect relationships between transformational leadership and the successful implementation of EBP, through staff attitudes towards EBP, while Fenwick et al. (2019), revealed the impact of leadership on staff attitudes towards feedback, was dependent upon the quality of the supervisor - practitioner relationship. A further study revealed transformational leadership style was associated with higher staff ratings on working alliance. However, this relationship was dependent upon the work climate (Green et al., 2014b).

In terms of work-related behaviour, higher levels of task performance and innovative work behaviour among staff were related to higher ratings on a measure of servant leadership. This style of leadership was shown to enhance work related behaviours by exerting a positive effect on staff well-being (der Kinderen et al., 2020).

Impact of Leadership Style on the Work Environment

Across the studies, servant and transformational leadership styles were positively associated with aspects of the work environment. In one study, servant leadership style was associated positively with the work climate (der Kinderen et al., 2020). Studies which explored transformational leadership found positive associations between this style of leadership and the workplace culture and climate, and with perceptions of work autonomy

among staff (Aarons et al., 2011; Aarons et al., 2017; Brimhall et al., 2016; Corrigan et al., 2002; Green et al., 2014a, 2014b; Madathil et al., 2014). According to the findings of Aarons et al. (2017), however, the positive impact of transformational leadership style on work environment was only apparent when there was concordance between staff and leaders' ratings of transformational leadership.

Synthesis of the studies included in this review revealed that both forms of relational leadership styles, servant and transformational, were associated positively with a range of staff and workplace outcomes. Additionally, studies which examined indirect relationships between the leadership styles and outcomes highlighted underlying mechanisms and conditions under which servant and transformational leadership styles exert a positive influence. These findings, whilst generally promising, need to be considered and evaluated within the context of study quality.

Quality of Studies

A summary of the quality assessment descriptive ratings, for each journal article reviewed using the MMAT, can be found in Table 5. For corresponding descriptive, and mixed method questions used to evaluate study quality (see Appendix D).

Table 5.

Quality information of included studies

Survey Studies	Quality Review Questions/Responses						
	S1: Are there clear research questions?	S2: Do the collected data allow to address the research questions?	4.1: Is the sampling strategy relevant to address the research question?	4.2: Is the sample representative of the target population?	4.3: Are the measurements appropriate?	4.4: Is the risk of response bias low?	4.5: Is the statistical analysis appropriate to answer the research question?
Aarons (2006)	Yes	Yes	Can't Tell	Yes	Yes	Yes	Yes
Green et al. (2014a)	Yes	Yes	Can't Tell	Yes	Yes	Yes	Yes
Green et al. (2014b)	Yes	Yes	Can't Tell	Yes	Yes	Yes	Yes
Aarons et al. (2017)	Yes	Yes	Yes	Yes	Can't Tell	Yes	Can't tell
Brimhall et al. (2016)	Yes	Yes	Yes	Can't Tell	Yes	Yes	Yes
Fenwick et al. (2019)	Yes	Yes	Yes	Can't Tell	Yes	Yes	Yes
Green et al. (2013)	Yes	Yes	Yes	Can't Tell	Yes	Yes	Yes
Corrigan et al. (2002)	Yes	Yes	Yes	Yes	Can't Tell	No	Yes
der Kinderen et al. (2020)	Yes	Yes	Yes	Yes	Can't Tell	Yes	Yes
Farahnak et al. (2019)	Yes	Yes	Can't tell	No	Yes	Yes	Yes
Madathil et al. (2014)	Yes	Yes	Can't Tell	Yes	Yes	Can't Tell	Yes

Quality Review Questions/Responses

Mixed Method Studies	S1: Are there clear research questions?	S2: Do the collected data allow to address the research questions?	5.1: Is there an adequate rationale for using a mixed methods design to address the research question?	5.2: Are the different components of the study effectively integrated to answer the research question?	5.3: Are the outputs of the integration of qualitative and quantitative components adequately interpretated?	5.4: Are divergences and inconsistencies between qualitative and quantitative results adequately addressed?	5.5: Do the different components of the study adhered to the quality criteria of each tradition of the methods involved?
Aarons et al. (2011)	Yes	Yes	Yes	Yes	Yes	Yes	Can't Tell

Note: Studies in italics represent six papers reporting on two studies

Visual inspection of the quality ratings shown in Table 5 indicated mixed findings, however all studies met a number of core criteria. These ratings, however, need to be interpreted with caution, taking into consideration Hong et al. (2018) recommendation, advising against a reliance on the use of a numerical scoring system for studies using the MMAT. Hong et al. (2018), recommends a more detailed presentation of the quality findings, to better inform the appraisal of a study's quality. The current paper, therefore, goes beyond the inclusion of ratings only, to include a summary of the relative strengths and weakness of each study. The summary ratings, therefore, need to be considered alongside the studies' relative strengths and limitations (see Table 6)

Table 6.

Strengths and limitations of included studies

Author, Year	Strengths	Limitations
1a. Aarons (2006)	*Sample* • Large sample with a high response rate reducing the potential for response bias. • Detailed demographic information for participants, facilitates generalisability. *Measurement* • Provided detailed overview of measures, and alpha reliability scores. *Analysis* • Explained and justified.	*Sample* • Probability sampling, lacks information on inclusion/exclusion criteria. • Generalisable to similar settings/samples. *Measurement* • Potential for self-report bias. *Analysis* • Not possible to draw causal conclusions.
1b. Green et al. (2014a)	*Sample* • Large sample with high response rate reducing the potential for response bias. • Detailed participant information provided facilitating generalisability. *Measurement* • Provided current and previous evidence to support reliability of measures. *Analysis* • Defined and explained well and makes explicit attempts to control for potential confounding effects.	*Sample* • Probability sampling, lacks information on inclusion/exclusion criteria. • Generalisable to similar staff/contexts. *Measurement* • Potential for self-report bias. *Analysis* • Not possible to draw causal conclusions.

1c. Green et al. (2014b)	*Sample* • Large sample with high response rate, decreasing potential for response bias. *Measurement* • Use of well-defined and standardised measures. Reliability for measures reported for the current study. *Analysis* • Defined and justified analysis	*Sample* • Probability sampling, lacks information on inclusion/exclusion criteria. • Generalisability limited to similar setting/sample. *Measurement* • Potential bias due to self-reports *Analysis* • Potential for confounding variables, not possible to draw causal conclusions.
2. Aarons et al. (2011)	*Sample* • Information provided on sampling strategy allowing replication. • Demographic information provided *Measurement* • Measures standardised and well defined for most measures. • Follow up interviews to assess staff turnover in addition to self-reports. *Analyses* • Reported low missing data, increasing confidence in the findings. • Explores indirect relationships	*Sample* • Probability sampling. • No response rate reported. *Measurement* • Mainly self-report, potential for reporting bias. Includes follow up interviews however no information on how developed. • No information on how semi structured interviews were developed. *Analyses* • Lacks justification for analyses, unable to draw causal conclusions.
3. Aarons et al. (2017)	*Sample* • Details of inclusion/exclusion criteria provided • High response rate. *Measurement*	*Sample* • Probability sampling the increasing potential for sampling bias. • Limited demographic information. *Measurement* • Potential for self- reporting bias

	• Variables are clearly defined and measured with standardised tools. • Information on reliability of measures within the current study is provided *Analysis* • Explained and justified analysis. • Explores indirect relationships	*Analysis* • Unable to draw causal conclusions
4a Brimhall et al. (2016)	*Sample* • Large sample with high response rate, reducing potential for response bias. *Measurement* • Use of standardised measures with some explanation and justification provided. • Evidence provided for reliability and validity of measures used in the current study. *Analysis* • Explained and justified measures used, details on missing data provided. • Explores indirect relationships, beyond linear relationships. • Acknowledges potential overlap in constructs.	*Sample* • Non-random sampling, introducing potential for sampling bias. • Lack of demographic information • Generalisability limited *Measurement* • Potential for response bias due to inclusion of self-report measures. *Analysis* • Unable to draw causal conclusions
4b. Fenwick et al. (2019)	*Sample* • Large sample with high response rate suggesting low response bias *Measurement* • Justified use of and includes well validated measures.	*Sample* • Non-random sampling, introducing potential for sampling bias. • Lack of demographic information • Generalisability limited *Measurement*

	Analysis • Explores indirect relationships, beyond linear relationships. • Explains attempts to manage multi-collinearity.	• Potential for self- reporting bias *Analysis* • Unable to draw causal conclusions
4c. Green et al. (2013)	*Sample* • Large sample with high response rate. *Measurement* • Measures standardised and well defined for most measures. • Reported reliability of measures for the present study. *Analysis* • Explained and justified well. • Explores indirect relationships, beyond linear relationships.	*Sample* • Opportunity sampling with no explicit information on inclusion/exclusion criteria. • Lack of demographic information • Generalisability limited *Measurement* • Use of self-reports increasing potential for reporting bias. *Analysis* • Unable to draw causal conclusions.
5. Corrigan et al. (2002)	*Sample* • High response rate • Demographic information provided • Information provided for inclusion/exclusion criteria. *Measurement* • Information on reliability of measures used. *Analysis* • Explained and justified	*Measurement* • Potential for self-report bias. *Analysis* • Unable to draw causal conclusions

6. der Kinderen et al. (2020)	*Sample* • Includes some detail on inclusion and exclusion information. *Measurement* • Information on reliability of measures provided. *Analysis* • Explains and justifies analysis well. • Explores indirect relationships	*Sample* • Opportunity sampling. • Includes administrative staff however fails to provide a breakdown to determine proportion of different staff groups. Low response rate *Measurement* • Self-report measures increase potential reporting bias. *Analysis* • Analysis does not separate clinical and non-clinical i.e., administrative staff, may bias the findings due to potential differences among work groups. • Unable to draw causal conclusions
7. Farahnak et al. (2019)	*Sample* • Large sample with high response rate reducing potential for response bias. *Measurement* • Details on reliability of the EBPS and MLQ are provided. *Analysis* • Explained and justified analyses. • Explores indirect relationships	*Sample* • Lack of information on job role and/or inclusion/exclusion criteria beyond 'frontline' staff. *Measurement* • Potential for reporting bias due to self-report tools • Lacks detail on the development of the Implementation Success tool. *Analysis* • Unable to draw causal conclusions
8. Madathil et al. (2014)	*Sample* • Outlined sample required to determine size of effect. • Includes demographic information. *Measurement*	*Sample* • No response rate reported • Generalisable to nurses in similar settings *Measurement* • Reliance on self-reports *Analysis*

	• Information on reliability and validity of measures included. *Analysis* • Explains and justified analysis. • Explores indirect relationships	• Unable to draw causal conclusions

Note: Studies in italics represent six papers reporting on two studies

A number of studies included in this review reported large sample sizes increasing confidence in the findings, particularly since a larger sample increases the reliability of the statistical tests used. In contrast, Matadhil et al. (2014) included a relatively small sample size, however statistical testing was undertaken using bootstrapping methods which resampled the data multiple times. A further study by Aarons et al. (2011) did not provide fundamental information on sample size, making it difficult to determine if the statistical test was appropriate.

Furthermore, although most studies reported high response rates, a low response rate was noted in der Kinderen et al. (2020), while a further two studies failed to provide this information (Aarons et al., 2011; Madathil et al., 2014). Failure to report this information may be indicative of non-response bias, reflecting differences between participants who did take part, and those who did not. However, this is difficult to determine, particularly in studies which did not provide this information, reducing confidence in the findings. Similarly, the low response rates reported in der Kinderen et al. (2020), may reflect sampling bias, and could be indicative of problems in the research study design, and/or methods. For example, if the survey and/ or questionnaires used to collect data were either too lengthy, poorly worded or administered at a time when staff were busy, this is likely to impact on response rates, and subsequently, the staff who could or couldn't take part.

Mental health contexts are busy environments, with high levels of stress and staff turnover already outlined (Oates et al., 2021), under these circumstances, some staff may have had less opportunity, or have been less motivated to take part. Despite the need to develop research within mental health contexts, it is possible, the type of research designs used within the present review may have created a barrier, in terms of actually recruiting samples which reflect the wider staff population who work within mental health settings.

Non-random sampling methods, were used in studies in the current review, reflecting the cross-sectional nature of the study designs, increasing the risk for both sampling and reporting bias. Studies which failed to outline information on sampling methods and/or and did not provide information on inclusion and exclusion criteria, also adds to the risk of sampling bias. A lack of transparency regarding sampling methods used, also reduces the extent to which the findings can be generalised to similar samples and settings and hinders the ability to replicate studies.

Several studies included in the review, provided a detailed breakdown of participant characteristics (including the nature of multidisciplinary teams) and the nature of work contexts. This level of detail allows inferences to be drawn about similar mental health populations and contexts and facilitates comparisons between studies within the review. It is noteworthy, only one study referred to the inclusion of forensic services, however, it was not possible to determine the exact nature of the forensic setting, i.e., if this included child/adult services or if it included community forensic /secure in-patient settings (Madathil et al., 2014). This level of detail is vital, when considering findings in the review, suggesting, the impact of leadership style on outcomes was moderated by characteristics of the work environment (der Kinderen et al., 2020).

Self-report tools were used across the studies, with one study including both survey methods and semi-structured interviews (Aarons et al., 2011). According to Kreitchmann et al. (2019), self-report measures introduce the potential for response bias and may skew and/or obscure the findings. Self-report tools rely upon individuals to provide answers which are accurate. It is quite possible, however, participants struggling with their mental health, may not have recognised these signs and symptoms. Additionally, staff may not have wanted to respond accurately, if, for example, they were worried about confidentiality, or perceived

responses would be viewed by their managers. Some staff, however may have rated manager's more highly on servant and transformational leadership qualities, for similar reasons. The addition of semi-structured interviews, therefore, in the mixed method study provided a more objective measure of staff turnover.

A further consideration is the potential that staff, who provided higher ratings on leadership qualities, and positive outcomes, may in fact reflect those individuals who felt supported by their manager. In contrast, individuals, experiencing poor mental health, who were overstretched and/or absent from work due to stress for example, may not have had the capacity, resources, or motivation to take part. The inclusion of multiple data collection methods, therefore, may have helped to reduce the potential for reporting bias through the triangulation of methods.

The reliance on self-report tools across studies is also noteworthy, since they rely on pre-set answers to pre-defined questions. These 'forced choice' measures restrict responses to pre-set answers, preventing staff from providing an account of their views and experiences in their 'own words.' When considering this within the context of diversity, there is a possibility, some participants may have chosen not to take part in studies or may have dropped out, due to the language used, and meanings derived from these standardised questionnaires.

Taking into account the limitations outlined, most studies however, did explain and justify the use of self-report tools and included well-developed and validated measures. There were two studies however, which did not include formal scales, and/or, provided limited information regarding how the scales were developed (Aarons et al., 2011; Green at al., 2013). A further study failed to provide adequate information and/or justification, for the measures used, however, this may be due to its association with a larger study whereby this detail is given in the other publications (Aarons et al., 2006; Green et al., 2014a, 2014b).

The cross-sectional nature of the study designs included in the review involved exploring relationships between leadership style and a range of outcomes. This was achieved predominately through correlational and/or regression analyses. While the examination of relationships in studies was informative, they did not permit any causal conclusions. It is noteworthy, however, that several studies attempted to elucidate further understanding of mechanisms which might explain some of the relationships identified. These included studies which examined mediating or moderating effects. According to Hayes and Rockwood (2020), it is crucial to develop more in depth understanding of how or when one thing is related to another. These studies subsequently helped to illuminate ways in which authentic and transformational leadership styles were indirectly associated with staff, their working practices, and the work environment (Aarons et al., 2011; der Kinderen et al., 2020; Farahnak et al., 2019).

The main findings from the quality review of studies included, drawing upon both the quality ratings and the studies relative strengths and weakness, identified that the two overarching studies, comprising of six journal articles met most of the core MMAT quality criteria (Aarons, 2006; Brimhall et al., 2016; Green et al., 2013, 2014a, 2014b; Fenwick et al., 2019). Limitations regarding sampling methods were the main criticism for the papers by Aarons (2006), and Green et al. (2014a, 2014b) due to a lack of information on inclusion and exclusion criteria, and the sampling strategy undertaken, increasing the potential for sampling bias. Regarding the papers by Brimhall et al. (2016), Fenwick et al. (2019), and Green et al. (2013), there was a failure to provide detailed information on participant characteristics, making it difficult to conclude if the sample was representative of the target population. Aarons et al. (2011) mixed method study also met all, except one of the core criteria. In assessing the relative strengths and weaknesses of the study however, unlike the two larger

studies, which failed to provide sampling and participant information, the main failure of Aarons et al. (2011) study was the lack of information on how the semi structured interviews were developed, and the processes involved in undertaking the interviews.

Discussion

The aim of the current review was to examine and evaluate the literature, surrounding four relationally focussed leadership styles; authentic, ethical, servant and transformational leadership, with staff and workplace outcomes within mental health settings. Whilst the review intended to explore and evaluate studies across the four leadership styles, only two, out of the four leadership styles were included in the current review (servant and transformational). Only one of the studies, included a servant leadership style, with the remainder, examining transformational leadership. The first finding of the review, therefore, is that there is very little literature regarding the three newer forms of relational leadership styles; authentic, ethical and servant leadership, which aligns with Hoch et al. (2018).

These initial findings indicate a need to develop this research base, particularly since earlier research, outside of healthcare settings, has shown relationally oriented leadership brings a range of positive benefits across public and private sector organisations (Alilyyani et al., 2019). Even more pressing, is the observation that there appears to be a relative absence of research, examining these four relational forms of leadership across a range of mental health settings, as the mental health settings included in this review are all very similar. For example, only one study included ‘forensic’ settings, however in reality, mental health settings are diverse, yet, the research undertaken so far, appears limited. It should be noted, however, that the absence of information across studies regarding participant characteristics and the settings, make it difficult to determine where exactly these gaps are within general mental health and forensic mental health settings.

In terms of the overall findings of the review, similar patterns emerged in the current review with those outlined in earlier research, undertaken across general and healthcare organisations. These patterns reflect the positive influence of relationally oriented leadership

styles, specifically, transformational and servant leadership, on staff, their workplaces and working practices (Cummings et al., 2010, 2018; Wong et al., 2013). It is important to note, however, that these earlier reviews within the general healthcare literature did not aim to focus on *mental* healthcare settings. Instead, they focussed on general healthcare settings and their staff (Cummings et al., 2018). This is significant since mental health staff are particularly prone to stress and burnout (O'Connor et al., 2018), and the nature of forensic mental health settings, creates even greater challenges for staff, resulting in high turnover of staff (Oates et al., 2021). Given that earlier reviews, (Cummings et al., 2018) have noted some of the positive effects that servant and transformational leadership styles can have on staff well-being and burnout, it is crucial to expand and develop the research within diverse mental healthcare contexts, to aid further understanding.

Additionally, the current review revealed significant indirect relationships between servant and transformational leadership styles with staff and work-related outcomes. Interestingly, in one study, the nature of the work environment was shown to be a significant moderator of the relationship between servant leadership style and staff well-being (der Kinderen et al., 2020). These findings suggest that the impact of servant leadership style on both staff well-being and work performance were dependent upon the nature of the work environment. These findings point to the necessity to develop and expand research, which aims to understand how work contexts and environments may facilitate or hinder the influence of a servant leadership style.

Studies that incorporate mediation and moderation models to explore underlying mechanisms may be particularly informative and can inform theory and practice. As Neubert et al. (2016) points out, leadership does not operate in a vacuum and there are likely to be

numerous mechanisms through which a leadership style influences staff, the workplace and working practices in a positive way.

It seems just as important to explore the impact of leadership style on the work environment. As outlined in an earlier review by Cummings et al. (2018), and in accordance with the current findings, both servant and transformational leadership styles were shown to influence the work environment in a positive way. These are important results when considering the calls that have been made within healthcare services for leadership change (West et al., 2017). The current review findings suggest, there are complex reciprocal relationships at play, between leadership styles and the working environment. It seems, therefore, too simplistic, to expect that a change in either leadership or the work environment in isolation, provides the answer. Further understanding of these complex processes, however, could be developed with future research, which aims to explore various mediating and moderating models.

While the current review findings do add support for arguing that there is a complex interplay between leadership style and aspects of the work environment, the study designs within the current review, limit the ability to draw causal conclusions about these relationships. As discussed, there is a need for further research which is likely to benefit from more varied research methodologies and longitudinal designs.

Implications

Overall, the findings of the review have several important implications. Firstly, as far as is known, this is the first review which has attempted to explore relationally focussed leadership styles; authentic, ethical, servant and transformational together, with a range of staff and workplace outcomes, within mental healthcare contexts. The review also highlighted a relatively limited research base upon which to draw, and it is argued above that a key

priority for the future research agenda should be to explore relationally oriented leadership styles in mental health settings (including forensic mental health settings).

Considering the demands and challenges facing healthcare organisations and their staff (Greenberg et., 2020), and, the unique challenges for mental health staff (Oates et al., 2021), the current findings outline a pressing need, for interventions which develop and harness, relationally oriented leadership styles within NHS services. According to Schwartz et al. (2016), leadership styles, such as transformational leadership can be learned, which suggests there is potential to develop and train others, to hone the skills and qualities of relationally focussed leadership styles. However, since most of the research evidence included in this review, explores the positive influence of a transformational leadership style, investment might first start with this approach. Given, the potential benefits that newer forms of relational leadership styles may bring, it is also vital to develop understanding, of what it is, that the newer forms; authentic, ethical, and servant leadership styles may also bring, that is unique and similar. This is an important consideration, given the findings of Hoch et al. (2018), outlining similarities across authentic, ethical, servant and transformational styles of leadership.

As suggested, leadership does not operate within a vacuum (Neubert et al., 2016), and there are likely to be a number of barriers to developing and implementing leadership training, within healthcare organisations. Given the challenges outlined within healthcare services, including increased financial pressures (Greenberg et al., 2020), and limited resources (Oates et al., 2020), this is likely to impact upon the motivation and opportunities available, to train and develop staff. However, in order to develop ‘effective’ leaders, appropriate resources and financial investment will be needed.

Limitations

Several limitations in the current review need to be acknowledged. First, criticisms outlined regarding the study methodologies, largely reflect the aim of the current review, which intended to examine relationships between leadership styles and outcomes, making it difficult to draw causal conclusions, due to the potential for confounding factors. Future reviews, therefore, are likely to benefit from the inclusion of longitudinal and/or data collection at multiple time points, rather than cross sectional studies alone. Developing research across different time points, enables participants who are absent on one day of the research, to take part on another.

It is also worth noting, while experimental studies are considered to be the 'gold standard', with strict inclusion criteria, it is unrealistic to develop reviews focussed purely on experimental designs, due to the nature of psychological research. While the current review did not include experimental studies, several studies included in the review did explore the role of additional variables, through mediation and moderating analyses. There appears to be a dilemma, on the one hand, the more systematically studies control for confounding effects using strict inclusion criteria, the less generalisable the findings are to the 'real world.'

Reflecting on ways in which these limitations may have impacted on the current review findings, and the conclusions drawn, future studies would benefit from attempting to control for covariation statistically, by measuring and including other variables as covariants. Future reviews would also benefit from the inclusion of studies which draw upon random-sampling methods, reducing the potential for sampling bias. In the current review, the potential for sampling bias was problematic across a number of studies, limiting the ability to infer how well the study samples represented wider mental health staff populations.

Going forward there is a need to expand upon the research base. Although the current review did not include qualitative studies, future reviews would benefit from widening the inclusion criteria to incorporate qualitative research methodologies. It is also noteworthy, the grey literature and dissertations were not included in the current review, which means this review may not reflect all the available work. Reviews developed in the future might, therefore, benefit from the inclusion of dissertations and contact authors to address the 'file drawer' problem, whereby non-significant findings are not published (Rosenthal, 1979).

Another limitation reflects the nature of the systematic review undertaken. Despite the implementation of systematic methods in developing the current review, there have been criticisms made about the value of systematic reviews, arguing they are inadequate, and subjective (Hammersley, 2019). However, as Hammersley (2019) points out, there is always a potential for bias. Taking these points into account, the current review aimed to be as transparent as possible, making clear which studies were included, employing systematic methods. A further criticism reflects a view that reviews should focus on establishing causal mechanisms, and estimates of effect sizes, adopting meta-analyses, for example. This is something which the current review did not provide and was not the review focus, instead, the current review aimed to examine what is, and is not known, about relational leadership styles; authentic, ethical, servant, and transformational within mental health settings. As Hammersley (2019) outlines, systematic reviews often do not focus on a single dimension, however, they do have the potential to generate and synthesise current knowledge in a particular field. This is something which the current review was able to do, and subsequently, outlined gaps in the research literature, providing a rationale for future research studies.

Finally, it is important to comment on the ordering of the findings and quality appraisal undertaken. Although the quality review has been presented after the findings, the

papers were evaluated for quality prior to synthesising the findings, and were subsequently held in mind, guiding the findings of the review. It is acknowledged therefore, that the ordering of these two phases could have been better presented (in the correct order/with the quality review first) to better guide and inform the reader.

Conclusion

Despite the limitations discussed, this review contributes to the knowledge base surrounding relational leadership styles, given it is the first known review to consider their relationship with key outcomes within *mental* health settings. Adding these findings to earlier reviews, which have also explored relational leadership styles, provides further support for the positive impact servant and transformational leadership styles may have on a range of staff and workplace outcomes within healthcare settings (Cummings et al., 2010, 2018; Wong et al., 2013). The lack of research regarding authentic and ethical leadership styles means no conclusions can be drawn yet regarding their potential impact. Only through the future development of empirical research, aiming to explore and expand the research across a range of mental healthcare contexts, can it be determined what 'effective' leadership might be within these challenging work environments. According to John and Joseph (2009), effective leadership is dependent on the organisation, and not all leaders who thrive in one will be successful in another. Thus, leadership is unlikely to be a 'one size fits all'.

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Empirical Research: Servant Leadership and Psychological Well-Being among Mental Health Staff: The Mediating Role of Work Environment

Chapter 2

Abstract

The style of leadership adopted within healthcare organisations influences the psychological well-being of staff, and their work environments, and can influence staff well-being through the leader's impact on the work environment (de Zulueta, 2015). The study aimed to examine associations between a servant leadership (SL) style and the psychological well-being (burnout and work engagement) of mental health staff, and the work environment, and to explore if these relationships could be explained through the mediating role of the work environment. A cross sectional survey design was developed with thirty mental health professionals, working in secure-inpatient mental health settings. Participants completed the Ehrhart's (2004) Servant Leadership Measure, Maslach et al. (2018) Burnout Inventory, Utrecht Work Engagement Scale, Schaufeli & Bakker, (2004), and Areas of Worklife Survey, (Leiter & Maslach, 1999). Hypotheses were tested via Pearson's correlation coefficients and mediation analyses using PROCESS Macro (Hayes, 2013). Servant leadership was significantly associated with the three burnout dimensions (emotional exhaustion, depersonalisation, personal accomplishment) and with work engagement. The work environment mediated the relationship between SL and emotional exhaustion. No evidence was found for a significant indirect effect of the work environment on relationships between SL and depersonalisation, personal accomplishment, or work engagement. The results of the current study share similarities with the existing research literature, indicating SL style has a positive impact on psychological well-being among mental health staff. The findings also provide insights into how this style of leadership may influence staff well-being through the positive impact they have on mental health working environments.

Introduction

There appears to be a paradox within healthcare systems. On the one hand, it has been suggested that high social and moral values are placed upon a 'compassionate' care approach, and yet, it has also been asserted that healthcare systems are failing to uphold an ethical stance (de Zulueta, 2015). These positions are clearly at odds and have important implications for the provision of high quality healthcare services. Concerns surrounding healthcare provision have also been highlighted by a number of high-profile cases and subsequent reports regarding UK healthcare services, including the failures identified in the Francis Inquiry (2013) into the Mid Staffordshire NHS Foundations Trust, leading to calls for leadership change.

More recently, the Ockenden Report (2020) surrounding maternity care provision identified repeated failures by the Shrewsbury and Telford Hospital NHS Trust citing fearful and negative workplace cultures and problematic leadership. A review of leadership and governance within the Belfast Health and Social Care (HSC) Trust surrounding allegations of physical and mental abuse of vulnerable individuals with complex mental health and forensic needs highlighted dysfunctional leadership (Department of Health (DoH), 2020). Despite the earlier failures, recommendations, and calls for compassionate leadership within the NHS (West et al., 2017), the Ockenden Report (2020), highlighted similar challenges and calls for leadership change.

The role of leadership within organisations cannot be understated. It is argued to be crucial to organisational functioning and performance (Selladurai, 2014; van Dierendonck et al., 2011, 2013) and a key component of quality healthcare provision (Cummings et al., 2018). According to the healthcare literature, leadership has been shown to influence a range of outcomes, including staff satisfaction, intention to leave, and workplace culture

(Cummings et al., 2018), in addition to staff well-being, stress and burnout (Alilyyani et al., 2018), medical errors and patient satisfaction (West et al., 2017; Wong et al., 2013).

According to Newman et al. (2020), stress refers to the experience of emotional or mental tension, in relation to difficult and/or demanding circumstances. Whilst low levels of stress can enhance motivation to achieve goals, when stress is prolonged, and/or not well managed, this can have a negative impact on well-being and result in burnout. Accordingly, burnout has been described as a state of mental, emotional, and physical exhaustion, whereby a person may experience a sense of overwhelm, and, consequently, may feel unable to meet demands placed upon them (Newman et al., 2020). Furthermore, Maslach (1982) suggests burnout reflects three main characteristics: emotional exhaustion, depersonalisation, and personal accomplishment. According to Maslach (1982), emotional exhaustion involves feeling overburdened and depleted of emotional resources. Depersonalisation, is said to refer to cynical and negative attitudes towards others, while a sense of personal accomplishment is diminished when a person experiences burnout. Reduced personal accomplishment, reflects a sense of feeling insufficient in relation to performance in a particular role. In contrast to the experience of burnout, well-being has been described as an intrinsic state of happiness, life satisfaction and sense of connectedness, reflecting pleasant cognitive and emotional experiences, in relation to aspects of a person's life (Nelson et al., 2014).

Leadership has been described as the patterns and qualities displayed by those in various positions of authority with the ability to influence others to obtain goals (Kelly & Hearld, 2020). Northouse (2007) suggested leadership is a 'process whereby an individual influences a group of individuals to achieve a common goal' (p. 3). It is important to emphasise that not all leaders are considered to have a positive effect: some suggest that the influence of the leader is likely to depend on the style of leadership adopted (Nelson et al.,

2014). The difficulty, however, is that what determines ‘effective’ leadership continues to be debated (Cummings et al., 2018). Despite this ongoing debate, there has been a recent move towards understanding the importance of relational, and shared leadership styles (Haar et al., 2017).

Within the research literature, there are some studies which have grouped leadership styles according to the extent to which a leader is considered to prioritise people or tasks, and these studies have demonstrated that leaders who prioritise people and relationships are associated with a range of positive outcomes (Cummings et al., 2018; Wong et al., 2013). In one review, authentic leadership, a leadership style considered to be relationally focussed, was associated negatively with staff turnover and absenteeism, and positively with job satisfaction (Alilyyania et al., 2018). More recently, a review undertaken by Niinihuhta and Häggman-Laitila (2022) highlighted the positive effects of relationally oriented leadership styles on staff well-being, and it is argued that these styles of leadership contribute to a more positive work environment (Nelson et al., 2014).

In support of these assertions, reviews comparing relational styles of leadership with those considered more task focussed on a range of outcomes revealed that leaders who prioritise relationships over tasks are associated with a more positive workplace climate and culture, and with more time spent with patients (Cummings et al., 2010, 2018) and fewer medication errors (Wong et al., 2013). It is noteworthy, however, that while the overall findings from these reviews indicate the positive influence of leaders who prioritise relationships over tasks, similar positive effects for both the task oriented and relationally oriented leadership styles were identified when considering levels of emotional exhaustion amongst nursing staff (Cummings et al., 2018).

Despite these similarities for levels of emotional exhaustion, there appears to be a growing awareness that leaders who prioritise relationships, are empathic and show compassion, are associated with lower levels of burnout amongst staff (Kelly & Hearld, 2020). Additionally, van Dierendonck et al. (2011) argued that in order to foster employee well-being, and promote healthy workplaces, the leadership approach needs to be underpinned by an ethical stance and focussed on others. The emphasis on 'other' is exemplified by servant leadership, a style of leadership which is considered relationally oriented (der Kinderen et al., 2010; Eva et al., 2019).

Servant Leadership (SL) is a style of leadership focussed on relationships with others and is said to reflect a positive and holistic approach, emphasising ethical qualities (Hoch et al., 2018; Neubert et al., 2016). A SL style is also asserted to reflect a 'compassionate' leader stance (de Zulueta, 2015), and leaders with an SL style are able to empower others to reach their potential (van Dierendonck et al., 2011). According to Greenleaf (1977), servant leaders prioritise the needs, development, and well-being of 'followers,' based on the ethical orientation of the leader. In prioritising and supporting others to achieve their potential, servant leaders are argued to foster and promote more engaged and effective workforces (Ehrhart, 2004; Neubert et al., 2016). According to Greenleaf (1977), servant leaders start out with a genuine interest, in serving others first. In contrast to more traditional leadership styles, which tend to exercise power from the 'top down', servant leaders prioritise and support others to develop and reach their potential (Neubert et al., 2016).

Drawing upon social learning theory (Bandura,1977), it is suggested that when an employee perceives their leader to be an ethical and trustworthy role model, they observe and subsequently adopt the values, attitudes, and behaviours of the leader (Eva et al., 2019; Neubert et al., 2016). This also aligns with West et al. (2017) asserting that leaders promote

positive behaviour more strongly through what they do. According to de Zulueta (2015), servant leaders are likely to be viewed as credible ethical and trustworthy role models due to their focus on others and altruistic qualities, such as being motivated to serve others without expecting anything in return. Through the servant leader's treatment of others, staff are expected to observe, learn, and, subsequently, model this behaviour incorporating similar values and actions within their own work environment (Neubert et al., 2016).

There are, however, several criticisms surrounding SL research and theory. Some have suggested the SL construct itself is not well defined and lacks empirical support (de Zulueta, 2015), whilst others have proposed that the literature base has not focussed enough on the application of SL in practice (van Dierendonck et al., 2011). Despite these criticisms, Neubert et al. (2016) asserts that the interest in SL style, and its focus on relationships, engaging employees and 'service to others', continues to grow. Furthermore, SL has been aligned with other forms of positive leadership, including transformational leadership, one of the most well researched leadership approaches (Hoch et al., 2018).

Positive relationships have been reported between SL style and a broad range of outcomes within both the general and healthcare leadership literature (Eva et al., 2019; Hunter et al., 2013; Laschinger et al., 2015; Parris & Peachey, 2013). Within healthcare settings, a SL style has been argued to influence a range of staff and patient outcomes in a positive way, including staff and patient satisfaction (Neubert et al., 2016). Furthermore, negative relationships have been identified between a SL style and emotional exhaustion (Bobbio et al., 2012), and with staff turnover (Hunter et al., 2013). According to Neubert et al. (2016), a SL style influences and promotes positive workplace outcomes by developing trust with staff while promoting supportive behaviour.

The impact of SL style on well-being and experiences of stress among staff working within healthcare settings is a vital consideration, particularly since staff burnout has been linked with staff turnover with clear implications for healthcare provision (West et al., 2017). Furthermore, strained working conditions are proposed to negatively impact upon the morale of staff within health care settings, subsequently placing them at a higher risk for developing mental health problems in comparison to the general working public (O'Connor et al., 2018; Shields & Wilkins, 2006). Staff working within mental health settings are considered particularly vulnerable to stress and burnout due to the nature of the working environment, which often involves complex therapeutic relationships and presentations of self-harm and patient suicide (Jenkins & Elliott, 2004; Rössler, 2012). Within forensic and secure mental health contexts, there is also the requirement to manage high levels of verbal and physical aggression (Mason, 2002; Oddie et al., 2007). Furthermore, many individuals accessing forensic mental health services have experienced trauma and abuse histories (Musket, 2014). Consequently, staff who support individuals with complex trauma and forensic histories are at increased risk for experiencing stress and/or vicarious trauma (Oates et al., 2021; Sodeke-Gregson et al., 2013).

Within mental health contexts and forensic mental health services, it has been proposed that leadership styles can help to moderate against burnout amongst staff (Kelly & Hearld, 2020). Those in leadership positions are said to create a sense of relief for staff experiencing stress due to working within uncertain and unpredictable environments (Haslam & Reicher, 2007). The potential role that a leader may play in buffering burnout amongst staff is a crucial consideration, particularly when considering the assertion that higher burnout levels among staff are associated with staff turnover and poorer care (West et al., 2017).

Importantly, the research literature indicates that a SL style is associated positively with both staff well-being and the working environment (der Kinderen et al., 2020; Gotsis & Grimani, 2016; Hunter et al., 2013). It could be concluded, therefore, that this style of leadership is exerting a direct positive influence on these outcomes, however this position fails to consider the role of potential underlying dynamics and processes. For example, der Kinderen et al. (2020) illustrated that the influence of a SL style on staff well-being was dependent on the workplace climate. These findings highlight the mediating role of workplace factors in the relationship between a SL style and staff well-being.

One model which reflects aspects of the work environment and is associated with staff well-being is the Areas of Worklife (AWL) model (Leiter & Maslach, 1999). The AWL model reflects six components of the work environment (workload, control, rewards, community, fairness, values). The AWL model is based upon the premise that employees' perceptions of any of the six AWL characteristics as being low is associated with increased risk for burnout (Brom et al., 2015; Leiter & Maslach, 2009). In contrast, when perceptions of the AWL are high, this is asserted to buffer burnout and promote work engagement amongst employees (Leiter & Maslach, 2003).

Healthcare studies which have explored interrelationships between relationally oriented leadership styles and the AWL model and staff well-being have demonstrated, when an overall person-job match in the six AWL characteristics is reported, this mediates the leader's influence on work engagement and burnout levels among nursing staff (Bamford et al., 2013; Laschinger at al., 2015). The findings were subsequently interpreted as evidence that a relational leadership style influences staff well-being positively through the leaders' impact on the work environment. A SL style has been described as relationally oriented

(Neubert, 2016), and the research base has shown that this style of leadership, is associated positively with staff well-being and the work environment (der Kinderen et al., 2020; Gotsis & Grimani, 2016; Hunter et al., 2013). Despite these assertions, there is no known study which has attempted to explore interrelationships between a SL style, AWL and staff well-being within *mental* health contexts. Considering the emerging research literature and the assertion of der Kinderen et al. (2020) that a SL style is conducive to improving staff well-being and organisational outcomes, it seems crucial to explore some of the potential underlying mechanisms through which a SL style may influence staff well-being.

Within the literature, psychological well-being and psychological distress reflect the main measures of psychological health (Nelson et al., 2014). Karademas (2007) suggested that in the past there has been an emphasis on exploring negative constructs such as burnout. However, since strategies which focus on improving psychological well-being in the workplace bring a range of benefits for staff and organisations, it is argued to be beneficial to consider both positive and negative aspects of well-being (Nelson et al., 2014). Leiter and Maslach (1999), suggested engagement and burnout reflect opposite positions on a continuum in relation to workplace well-being, with the former reflecting the positive end and burnout the negative. Importantly, research has illustrated relationships between a SL style with work engagement and burnout among staff within private and public organisations (Babakus et al., 2010; Bobbio et al., 2012; Haar et al., 2017).

Across a range of organisations, SL style has been shown to influence staff well-being and the work environment in a positive way (Eva et al., 2019; Parris & Peachey 2013). Within the healthcare literature, a more limited research base reveals positive relationships between a SL style, staff well-being and the work environment (der Kinderen et al., 2020; Gotsis &

Grimani, 2016; Haar et al., 2017; Hunter et al., 2013). However, in reviewing these studies, low response rates were noted (der Kinderen et al., 2020; Haar et al., 2017), and may be indicative of sampling bias. In der Kinderen at al. (2020) however, this is difficult to determine as the study failed to provide detailed information on the sampling methods applied and participant demographic information.

Most of these studies, however, were undertaken within general healthcare contexts, and there is a gap in the research literature which aims to explore underlying mechanisms through which a SL style may influence the well-being of staff. An exception to this, is the study by der Kinderen et al. (2020) which took place within mental healthcare settings and explored indirect relationships and processes. However, in this study, participants were drawn from both direct clinical roles and those who were not working in a clinical capacity, such as administrative staff. The failure to provide detailed information on the professional background of staff, makes it difficult to determine how well the findings generalise to wider populations of staff working in mental health settings. Additionally, the effect sizes for relationships between SL style, and outcomes were small, which has implications for the reliability of the findings.

This study therefore aims to address some of the criticisms reflecting earlier research studies, and to explore underlying mechanisms which may explain the effect of a SL style on burnout and work engagement levels. Additionally, to establish if these relationships can be understood through the influence of a SL on the work environment.

The current study therefore aims to address the gaps outlined within the literature and contribute to the research base by investigating the following hypotheses:

Hypothesis 1 - Servant leadership style will be negatively associated with emotional exhaustion and depersonalisation and positively associated with personal accomplishment and work engagement among staff.

Hypothesis 2 - Characteristics of the work environment will mediate the relationships between servant leadership style and work engagement, and servant leadership and burnout levels among staff.

Methodology

Design

The study was a cross-sectional online survey. The University of Birmingham Science Technology Engineering and Mathematics Ethics Committee and Research Governance granted approval for this study (ERN_19-1846; dated 20th August 2020) and (RG_19-244) (see Appendix A). The National Health Service (NHS) Health Research Authority also provided approval (IRAS 276913) (see Appendix B). A risk assessment was also undertaken (JW SOPHS_21_15_JW) and approved.

Participants

Participants were staff members from a private health care provider. The sample characteristics are presented in Table 7.

Table 7

Participant characteristics

Demographic information	n	%
Gender		
Male	12	40
Female	18	60
Age in years		
21-29	10	33
30-39	4	13
40-49	6	20
50-59	10	33
Profession		
Assistant Psychologist	2	7
Dietician	1	3
Technical Instructor	1	3
Health Care Assistant	6	20
Teacher	1	3
Nurse	5	17

Patient Events Co-ordinator	1	3
Peer Support Worker	1	3
Psychologist	4	13
Vocational Skills Instructor	1	3
Sport and Exercise Therapist	1	3
Support Worker	1	3
Did not state	5	17
Work Unit		
Children	7	23
Adult	13	43
Learning Disability	4	13
Not stated	6	20
Time in current post		
3-6 months	3	10
7-11 months	3	10
1-2 years	6	20
3-5 years	4	13
6-10 years	7	23
11-15	3	10
16-20	1	3
21 + years	3	10
Time under line manager		
3-6 months	7	23
7-11 months	6	20
1-2 years	10	33
3-5 years	6	20
6-10 years	1	3
Time working in healthcare		
3-6 months	1	3
7-11 months	1	3
1-2 years	3	10
3-5 years	4	13
6-10 years	6	20
11-15 years	1	3
16-20 years	6	20
21 + years	8	27

Measures

The online survey was hosted on the Qualtrics site (www.qualtrics.com). All participants were invited initially to complete some questions about demographic characteristics. Variables included in the current study were servant leadership, burnout, work engagement and work environment and were measured using the following questionnaires:

Demographics

Participants in the study were asked to provide information on their gender, age, profession, particular clinical area of work, length of time in years and months working in (a) current post, (b) working under current line manager, and (c) in health care (see Appendix C).

Leadership

Servant Leadership was measured using Ehrhart's (2004) 14-item global scale, a widely used and validated scale of servant leadership (Parris & Peachey, 2013). The measure includes seven dimensions which are averaged together for one total measure of servant leadership. Participants are asked to rate their line manager on a 5-point Likert scale (1 = strongly disagree, to 5 = strongly agree), with higher scores indicating perceptions of the line manager as exhibiting a higher degree of servant leadership style. Previous research within healthcare contexts has revealed acceptable levels of Cronbach alpha scores $\alpha = 0.96$ (Neubert et al., 2016).

Psychological Well-being

Earlier research has tended to focus on negative aspects of well-being, however, it is important to also explore positive aspects of well-being (Karademas, 2007; Nelson et al., 2014). Therefore, measures of burnout *and* work engagement were included.

Burnout. The Maslach Burnout Inventory Human Services adapted for Medical Personnel (MBI-HSS; Maslach et al., 2018) was used. The MBI-HSS is a widely used 22-item measure of burnout with three subscales emotional exhaustion (EE), depersonalisation (DP), and personal accomplishment (PA). Sample items include 'I feel emotionally drained from my work' and 'I don't really care what happens to some patients'. While a single score can be calculated from the three subscales to establish if criteria is met for burnout, the measure was developed to aid knowledge and is deemed more informative to consider all three constructs (Ray et al., 2014). Individuals are asked to answer questions related to their work on a seven-point rating scale ranging from 0 (never) to 6 (every day) with higher scores indicating higher rates of EE, DP, and PA.

The MBI-HSS has been widely used within the research literature to measure levels of burnout amongst healthcare professionals. Acceptable Cronbach α scores have been reported for all three subscales (EE = 0.9, DP = 0.79, and PA = 0.71, Michalec et al., 2013).

Work Engagement. The 17-item Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2004) was used to assess levels of work engagement among staff. The UWES is a widely used measure of work engagement with three subscales (vigour, dedication, absorption). Sample items include 'At my work I am bursting with energy', 'Time flies when I'm at work.' The total score was used in the current study as this has been recommended due to the potential for high intercorrelations among the subscales (Shaufeli et al., 2002). Individuals are asked to answer questions related to levels of work engagement on a seven-point rating scale ranging from 0 (never) to 6 (always) with higher scores indicating higher levels of overall work engagement.

The UWES has been widely used within the research literature to measure levels of work engagement amongst health care professionals and acceptable Cronbach α scores have been reported α = 0.93 (Schaufeli et al., 2002).

Work Environment

Areas of Worklife. The 28-item Areas of Worklife Survey (AWS; Leiter & Maslach, 1999) was used to assess staff perceptions of their work environment. The AWS is a widely used measure of the working environment based on perceptions of six characteristics (workload, control, reward, community, fairness, and values). The workload dimension reflects an individual's perception that their workload is manageable; control refers to the perception that one has the capacity to influence decisions; reward relates to the perception that rewards are consistent with expectations; community reflects the overall quality of social interaction; fairness refers to the extent that decisions made, and resources allocated are considered fair; values reflect the ethics which draw a person to a particular role. The six dimensions are measured based on the frequency participants report experiencing items on each of the relevant subscales, based on a 5-point rating scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include 'I do not have time to do the work that must be done', 'I receive recognition from others for my work'. Higher scores indicate a higher degree of perceived alignment between the individual rater and the actual working environment.

The AWS has been widely used within the research literature to measure the six AWS characteristics within health care settings. Acceptable Cronbach alpha scores have been found for the six subscales ranging from α = 0.70 to 0.95 (Ray et al., 2014).

Procedure

A private mental healthcare provider was invited to participate in the study via their research and development (R&D) department. The R&D department confirmed their capacity to participate and agreed to promote the study to secure in-patient sites, via an email message composed by the researchers. Staff working in a face-to-face capacity with service-users, within secure in-patient settings, who were at least 18 years of age, were invited to participate. In addition, staff had to have been in post for a minimum of three months and had to have worked with their line manager within the same unit for three months. These inclusion criteria were outlined in the email.

Staff who were interested in finding out more about the research study were invited within the invitation email to access the participant information sheet (PIS) online via a hyperlink to the Qualtrics website. Individuals who subsequently wished to continue with the survey, after reading the PIS, had the option to move on to the survey by clicking next and in doing so it was explained to them that they were consenting to take part in the study. This was outlined in the PIS. Contact details for the researcher and the research supervisor were available within the PIS in the event of requiring any further information, to seek clarification, and/or to raise concerns. On completion of the survey, participants were then presented with an online debrief sheet. No incentive was used to encourage participation in the study. Participation was on an anonymous basis and all participant responses were kept confidential. The data collected via Qualtrics were stored at the University of Birmingham in a secure data store held on university servers to which only approved members of the research team had access.

Out of the forty-two participants who began the study, twelve did not complete it fully, resulting in a final sample size of thirty staff (71% completion rate). Applying the estimates outlined in Fritz and McKinnon (2007), a sample of 30 would have sufficient power to detect a large effect size.

Statistical Analyses

Analyses of the data were undertaken using IBM SPSS (v.24) software. Score distributions were explored using descriptive statistics for all variables. Internal reliability for full scales and subscales were also examined using SPSS. All scales reached appropriate levels of internal reliability ($\alpha \geq 70$) (Cortina, 1993). Cronbach's alpha scores and the number of items for each scale can be found below in Table 8.

Table 8

Cronbach's α for all included variables

Variables	Cronbach's α	Total items
Leadership		
Servant Leadership	0.98	14
Burnout		
EE	0.89	9
DP	0.76	5
PA	0.80	8
Work engagement	0.87	17
AWS		
Workload	0.73	5
Control	0.91	4
Reward	0.94	4
Community	0.82	5
Fairness	0.88	6
Values	0.86	4

Hypothesis 1 was tested using Pearson's correlation coefficients. Hypothesis 2 was analysed using a form of ordinary least squares regression with the PROCESS macro tool (Hayes, 2013) using SPSS software. Hayes and Rockwood (2020) suggest, in a 'simple mediation' model at least one causal variable (X) is expected to influence an outcome variable (Y) through one individual mediating or intervening variable (M). The PROCESS tool also allows for testing a series of intervening variables in the relationship between (X) and (Y).

In the current study, the PROCESS tool was used to test for multiple mediation to examine the relationships between servant leadership style (X) and psychological well-being (burnout subscales and work engagement total) (Y), with the six areas of worklife characteristics as multiple (M) intervening variables. According to Hayes and Rockwood (2020), the inclusion of multiple mediators between X and Y allows for in-depth exploration.

A bootstrap procedure which involves resampling of the original data multiple times, (*N*=5000) was performed in the current study, as per (Hayes, 2013). Bootstrapping provides an estimate of the entire distribution of samples indirect effects and is reported to be a powerful and robust method for testing mediator effects (Zhao et al., 2010). Additionally, bootstrapping is said to be a rigorous method providing reliable results, even when data does not conform to normality assumptions, and can be used with small samples (Hayes, 2013; Preacher & Hayes, 2004).

To test the hypothesised mediation effects, bias-corrected 95% confidence intervals were calculated from the bootstrapped samples for inferential testing. This is recommended by Hayes (2013) and Preacher and Hayes (2004) because indirect effects produce regression coefficients which are likely to violate assumptions of normality. Unlike 'normal theory',

however, assumptions are not made about the shape of the sampling distribution. (Hayes & Rockwood, 2020).

When calculating indirect effects in the current study, an indirect effect is considered significant when zero does not fall between the bootstrapped 95% confidence interval (Hayes, 2013). According to Zhao et al. (2010), bootstrapping is gaining momentum with mediation models. It has been suggested that the traditional, causal step methods, focussing on partial or complete mediation are less informative, and researchers should instead apply the 'indirect effect' approach (Hayes, 2013). The indirect effect for mediating variables (workload, control, reward, community, fairness, values) were calculated and expressed as effects.

Results

Descriptive statistics (mean, standard deviations, and score ranges) are provided for all variables measured (see Table 9).

Table 9

Mean scores (M), standard deviations (SD), and score range for all measures

Variables	*M*	SD	Range
Leadership			
Servant Leadership	44.17	18.06	14-70
Burnout			
EE	30.09	12.42	5-54
DP	7.03	6.34	0-24
PA	34.48	8.23	13-48
Work Engagement	3.52	0.81	1-5
AWS			
Workload	2.50	0.85	1-5
Control	2.80	1.26	1-5
Reward	2.70	1.41	1-5
Community	3.40	0.93	1-5
Fairness	2.37	1.03	1-5
Values	3.04	1.14	1-5

The mean sample's score on servant leadership was 44.17, similar to studies which have investigated servant leadership style in other public sector organisations (Neubert et al., 2016).

According to Maslach et al. (1996), among healthcare professionals, the current sample's mean score for emotional exhaustion 30.09, would be classified within the 'high' range, depersonalisation scores fell within the 'moderate' range at 7.03, while personal accomplishment mean sample's score of 34.48, is classified as being within the 'moderate' range.

The sample's mean total work engagement score for this study of 3.52, is classified in the 'average' range for work engagement (Schaufeli & Bakker, 2004).

According to Leiter and Maslach (1999), the current sample's mean scores on the six worklife characteristics; workload (2.50), control (2.80), reward (2.70), community (3.40), fairness (2.37), values (3.04) were all classified as falling within the moderate range.

Testing Hypothesis 1. *Servant leadership style will be associated negatively with emotional exhaustion and depersonalisation and be associated positively with personal accomplishment and work engagement among staff.*

Analyses of the Pearson's correlation coefficients provided support for the first hypothesis, revealing that perceptions among staff of their manager's servant leadership style were associated with burnout and work engagement levels. The correlations indicated a significant moderate negative association between servant leadership style and both emotional exhaustion (-0.52), and depersonalisation (-0.41), and a significant moderate positive correlation between a servant leader style and personal accomplishment (0.42). A strong significant positive association was also identified between servant leadership style and work engagement among staff (0.62). All correlations can be found in Table 10.

Table 10

Correlations matrix for all study variables

Variables	1	2	3	4	5	6	7	8	9	10	11
Leadership											
1.Servant Leadership	1	-0.52**	-0.41*	0.42*	0.62**	0.55**	0.57**	0.70**	0.70**	0.74**	0.57**
Burnout											
2.EE		1	0.48**	-0.15	-0.55**	-0.53**	-0.68**	-0.73**	-0.59**	-0.63**	-0.48**
3.DP			1	-0.10	-0.39*	-0.41*	-0.23	-0.23	-0.25	-0.33	-0.20
4. PA				1	.0.58**	0.09	0.23	0.24	0.36*	0.40*	0.33
5.Work Engagement		-			1	0.22	0.58**	0.53**	0.55**	0.60**	0.54**
AWS											
6. Workload						1	0.59**	0.65**	0.46*	0.60**	0.47**
7 Control							1	0.74**	0.68**	0.68**	0.63**
8. Reward								1	0.70**	0.82**	0.68**
9. Community									1	0.67**	0.66**
10. Fairness										1	0.83**
11. Values											1

*$p < .05$. **$p<.01$.

Testing Hypothesis 2. *Characteristics of the work environment will mediate the relationships between servant leadership and burnout, and servant leadership and work engagement, among staff.*

A correlation matrix was calculated to identify potential co-linearity between the subtests of the AWS (see Table 11). The correlation matrix for the six worklife characteristics clearly identifies substantial co-linearity between the individual subtests. Although the total explained variance of the mediated model and the total effect of the mediated pathways should be unaffected by co-linearity, it should be noted that the estimates of individual mediated pathways within the mediated model may be biased by the presence of shared variance between the worklife subscales.

Table 11

Correlation matrix of the subtests of the AWS

AWS Subtests	Values	Fairness	Community	Reward	Control	Workforce
Values	1	0.83**	0.66**	0.68**	0.63**	0.47**
Fairness		1	0.67**	0.82**	0.68**	0.60**
Community			1	0.70**	0.68**	0.46*
Reward				1	0.74**	0.65**
Control					1	0.59**

**p < .05. **p<.01.*

A series of four multiple mediation analyses were undertaken to test the second hypothesis for each of the burnout subscales (EE, PA, DP) and for work engagement. The Hayes (2013) PROCESS macro (Model 4) was used to generate standardised estimates for each of the four mediation models.

All of the mediation analyses were conducted using the Hayes (2013) analysis script for SPSS. The mediation analysis was conducted using bootstrapped standard errors based on

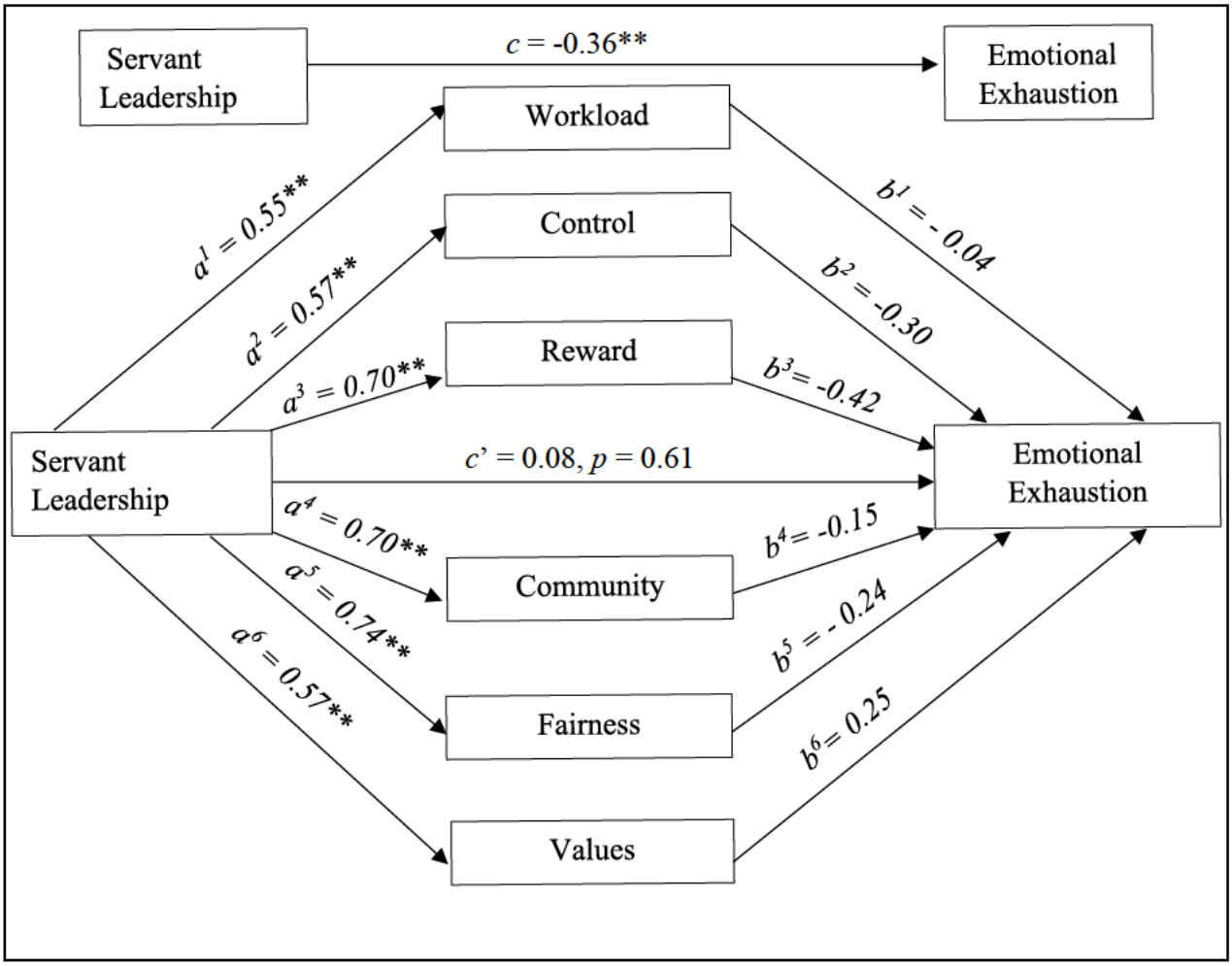
5000 replications. All parameter estimates were fully standardised. Details of each of the four analyses conducted are outlined below (see Figures 2 to 5).

Emotional exhaustion

To examine the relationship between servant leadership and emotional exhaustion, a mediation model was constructed using the workload, control, reward, community, fairness and values subscales of the AWS as mediated pathways between servant leadership and emotional exhaustion. The fitted mediation model is described in Figure 2.

Figure 2

The fitted mediated model of the relationship between servant leadership and emotional exhaustion



Note. Figure 2. Mediation model illustrating indirect effects of (X) servant leadership on (Y) emotional exhaustion through (M) worklife characteristics. Co-efficients are standardized

estimates. Servant leadership to worklife characteristics (paths a1 to a6) and the six worklife characteristics to emotional exhaustion (b1 to b6). *$p < .05$. **$p<.01$.

There was a moderate significant relationship between servant leadership and emotional exhaustion in the unmediated model (c = -0.36; p<0.01). However, in the mediating model (in which workload, control, reward, community, fairness, and values were added to the model as mediated pathways) the relationship between servant leadership and emotional exhaustion decreased to near zero (c' = 0.08; p = 0.61). Accordingly, a full mediation effect is observed for the relationship between servant leadership and emotional exhaustion.

The total indirect effect of all the mediated pathways when considered together was statistically significant (-0.64; 95% CI -1.27 to -0.11). The coefficients for each of the six individual mediated pathways is shown in Table 12.

Table 12

Completely standardised indirect effects of mediators on emotional exhaustion

	Effect	Bootstrap SE	Bootstrap 95% CI	
			Lower	Upper
Total Indirect Effect	-0.64	0.28	-1.27	-0.11
Workload	-0.02	0.12	-0.27	0.23
Control	-0.17	0.14	-0.49	0.10
Reward	-0.29	0.24	-0.83	0.12
Community	-0.10	0.20	-0.52	0.29
Fairness	-0.18	0.33	-0.71	0.63
Values	0.14	0.21	-0.31	0.58

Note: BCA Bootstrap confidence intervals that do not contain zero may be considered statistically significant.

It should be noted from Table 12 that none of the six mediated pathways are individually statistically significant. This is most likely the consequence of co-linearity between the workload, control, reward, community, fairness, and values subtests of the

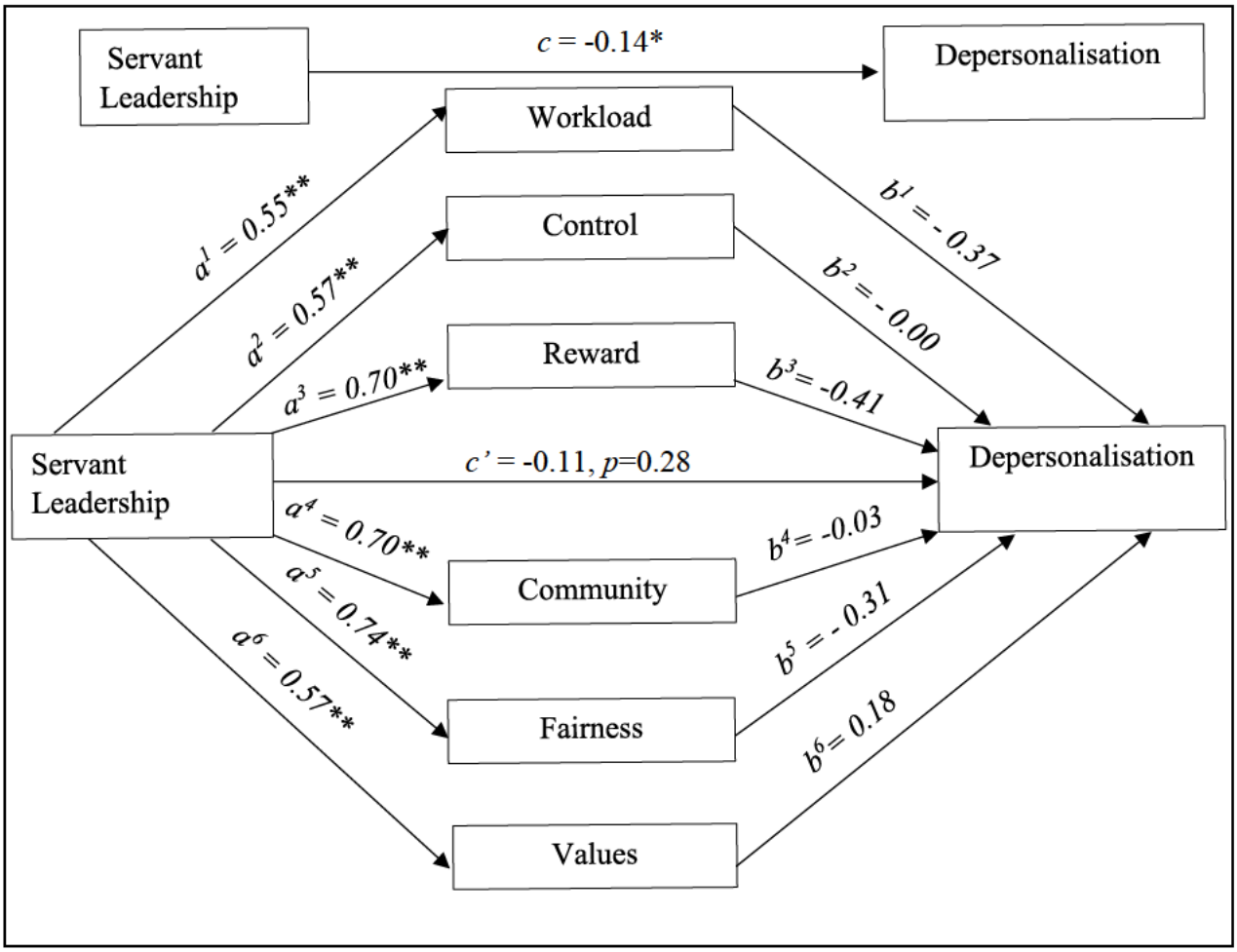
worklife characteristics, observed in Table 11. Accordingly, the contribution of the individual mediated pathways cannot be estimated without bias.

Depersonalisation

In order to examine the relationship between servant leadership and depersonalisation, a mediation model was constructed using the workload, control, reward, community, fairness and values subscales of the AWS as mediated pathways between servant leadership and depersonalisation. The fitted mediation model is described in Figure 3.

Figure 3

The fitted mediated model of the relationship between servant leadership and depersonalisation.



Note. Figure 3. Mediation model illustrating indirect effects of (X) servant leadership on (Y) depersonalisation (M) through worklife characteristics. Co-efficients are standardized

estimates. Servant leadership to worklife characteristics (paths a1 to a6) and the six worklife characteristics to depersonalisation (b1 to b6). *$p < .05$. **$p<.01$.

There was a small significant relationship between servant leadership and depersonalisation in the unmediated model ($c = 0.14$; $p<0.05$). In the mediating model (in which workload, control, reward, community, fairness, and values were added to the model as mediated pathways) the relationship between servant leadership and depersonalisation decreased to near zero and was no longer significant ($c' = 0.11$, $p=0.28$) indicating a mediation effect.

The individual and total indirect effect of all the mediated pathways, however, were not statistically significant. The coefficients for each of the six individual mediated pathways all included zero and the total indirect effect was also non-significant (-0.07; 95% CI -0.80 to 0.81). Accordingly, a significant mediation effect was not observed (see Table 13).

Table 13

Completely standardised indirect effects of mediators on depersonalisation.

	Effect	Bootstrap SE	Bootstrap 95% CI	
			Lower	Upper
Total Indirect Effect	-0.07	0.40	-0.80	0.81
Workload	-0.20	0.15	-0.48	0.14
Control	-0.00	0.21	-0.41	0.49
Reward	0.29	0.39	-0.63	0.97
Community	-0.02	0.34	-0.71	0.65
Fairness	-0.20	0.40	-0.98	0.68
Values	0.10	0.28	-0.46	0.74

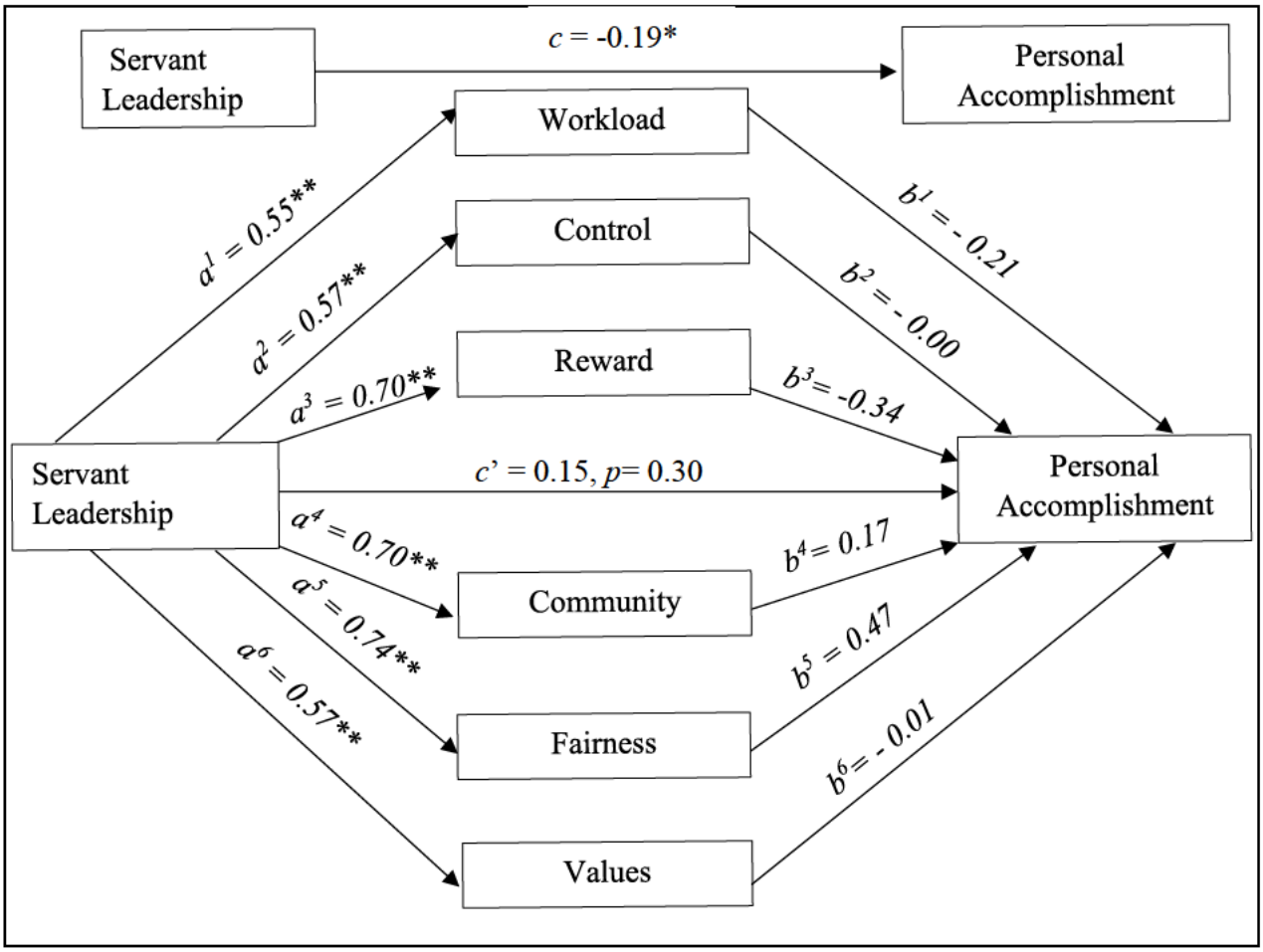
Note: BCA Bootstrap confidence intervals that do not contain zero may be considered statistically significant.

Personal Accomplishment

To examine the relationship between servant leadership and personal accomplishment a mediation model was constructed using the workload, control, reward, community, fairness, and values subscales of the AWS as mediated pathways between servant leadership and personal accomplishment. The fitted mediation model is described in Figure 4.

Figure 4

The fitted mediated model of the relationship between servant leadership and personal accomplishment



Note. Figure 4. Mediation model illustrating indirect effects of (X) servant leadership on (Y) personal accomplishment through (M) worklife characteristics. Co-efficients are standardized

estimates. Servant leadership to worklife characteristics (paths a1 to a6) and the six worklife characteristics to personal accomplishment (b1 to b6). **p < .05. **p<.01.*

There was a small significant relationship between servant leadership and personal accomplishment in the unmediated model (c = 0.19; p<0.05). In the mediating model (in which workload, control, reward, community, fairness, and values were added to the model as mediated pathways) the relationship between servant leadership and personal accomplishment decreased to near zero and was no longer significant (c' = 0.15, p=0.30) indicating a mediation effect.

The individual and total indirect effect of the mediated pathways all included zero and the total indirect effect was also non-significant (0.09; 95% CI -0.67 to 0.721). Accordingly, a significant mediation effect was not observed (see Table 14).

Table 14

Completely standardised indirect effects of mediators on personal accomplishment

	Effect	Bootstrap SE	Bootstrap 95% CI	
			Lower	Upper
Total Indirect Effect	0.09	0.34	-0.67	0.72
Workload	-0.11	0.14	-0.42	0.16
Control	-0.00	0.24	-0.62	0.38
Reward	-0.24	0.32	-0.92	0.41
Community	0.12	0.25	-0.45	0.56
Fairness	0.34	0.38	-0.43	1.13
Values	-0.00	0.23	-0.49	0.45

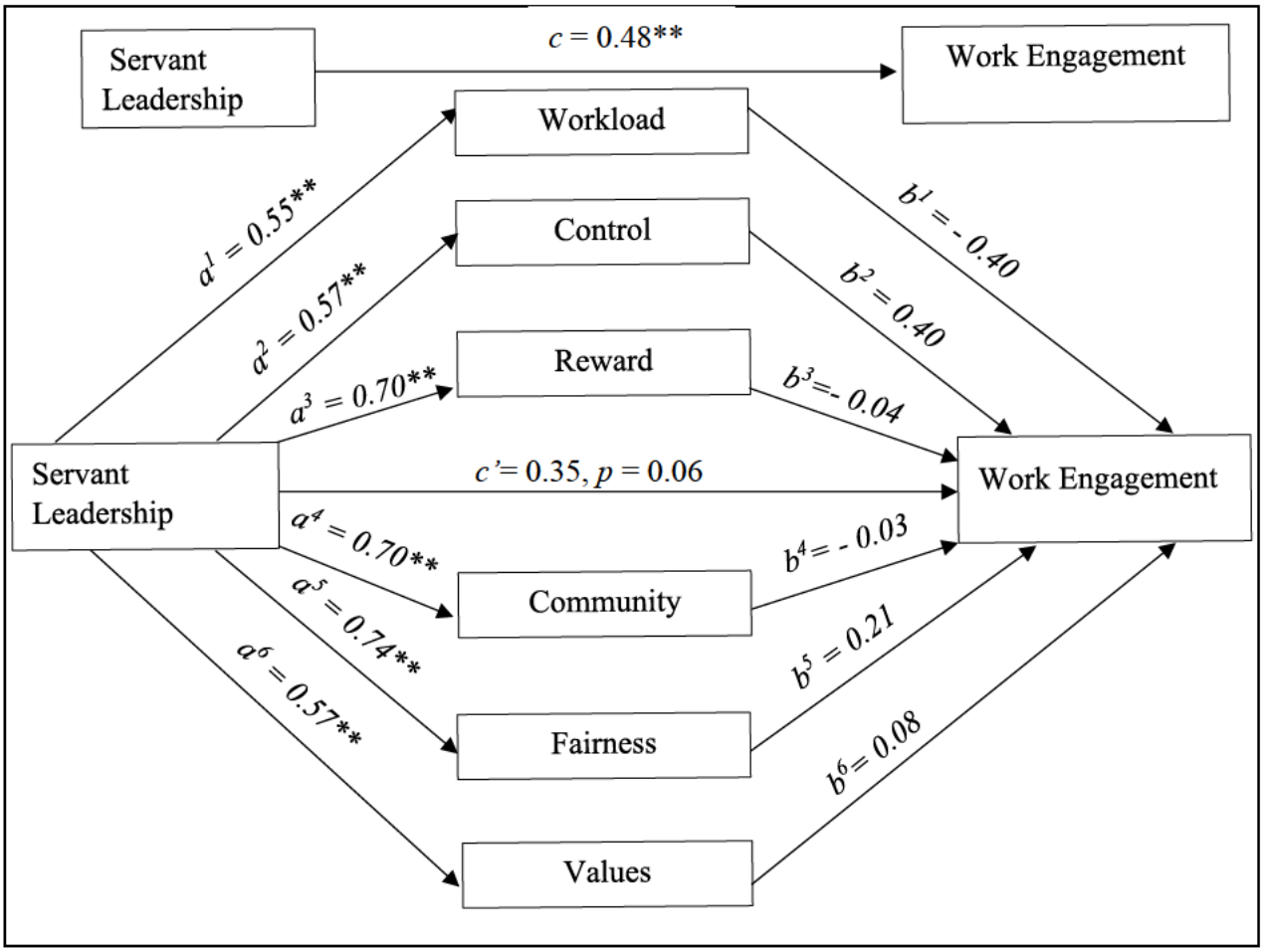
Note: BCA Bootstrap confidence intervals that do not contain zero may be considered statistically significant.

Work Engagement

To examine the relationship between servant leadership and work engagement a mediation model was constructed using the workload, control, reward, community, fairness and values subscales of the AWS as mediated pathways between servant leadership and work engagement. The fitted mediation model is described in Figure 5.

Figure 5

The fitted mediated model of the relationship between servant leadership and work engagement



Note. Figure 5. Mediation model illustrating indirect effects of (X) servant leadership style on (Y) work engagement through (M) characteristics of worklife characteristics. Co-efficients are

standardized estimates. Servant leadership to worklife characteristics (paths a1 to a6) and the six worklife characteristics to work engagement (b1 to b6). *$p < .05$. **$p<.01$.

There was a moderate significant relationship between servant leadership and work engagement in the unmediated model ($c = 0.48$; $p<0.01$). However, in the mediating model (in which workload, control, reward, community, fairness, and values were added to the model as mediated pathways) the direct relationship between servant leadership and work engagement remained relatively substantial ($c' = 0.35$; $p=0.06$) and the total indirect effect was non-significant (0.16; 95% CI -0.33 to 0.73). Accordingly, no mediation effect can be observed (see Table 15).

Table 15

Completely standardised indirect effects of mediators on work engagement

	Effect	Bootstrap SE	Bootstrap 95% CI	
			Lower	Upper
Total Indirect Effect	0.16	0.26	-0.33	0.73
Workload	- 0.22	0.14	-0.57	-0.00
Control	0.23	0.16	-0.04	0.60
Reward	-0.03	0.22	-0.39	0.31
Community	-0.02	0.19	-0.38	0.38
Fairness	0.15	0.33	-0.47	0.85
Values	0.04	0.19	-0.31	0.45

Note: BCA Bootstrap confidence intervals that do not contain zero may be considered statistically significant.

Discussion

The aim of the current study was to examine the relationship between perceptions of the manager's SL style with burnout and work engagement levels among staff working in secure mental health in-patient settings. Additionally, the study aimed to explore if the relationship between a SL style and burnout and work engagement could be explained through the influence of the leadership style on the work environment.

The results provided support for the first hypothesis, showing that managers who were rated higher in terms of a SL style were associated with lower levels of emotional exhaustion and depersonalisation, and with higher levels of personal accomplishment and work engagement. The findings provide support for the assertion that a SL style was positively associated with psychological well-being (burnout and work engagement) amongst staff working within secure mental health in-patient settings.

These findings are similar to those found in the general leadership literature, revealing positive relationships between SL and work engagement (Selladurai, 2014; van Dierndonck et al. 2013). Similar findings are also noted within private and public organisations which have explored a SL style with burnout and work engagement (Babakus et al., 2010; Bobbio et al., 2012; Haar et al., 2017). However, apart from Bobbio et al. (2012), these earlier studies were not undertaken within healthcare settings, and none of these were undertaken within *mental* health settings, therefore limiting direct comparison with the current study.

Additionally, there are differences noted between the previous studies and the current one in terms of constructs and measures used. For example, Haar et al. (2017) identified similar positive associations between a SL style and work engagement, however they used the Ehrhart (2004) short version measure of servant leadership, along with the three work

engagement subscales (vigour, dedication, absorption). In contrast, the present study, utilised the full SL measure, and the overall work engagement scores. One study has examined the relationship between a SL style with work engagement levels among mental health staff (der Kinderen et al., 2020). In this study similar patterns were revealed between a SL style and work engagement levels, however a different measure of leadership was used to the one included in the present study. However, given the similar findings using different measures, the findings lend support in terms of building a body of consistent evidence, despite the different measures used.

A series of mediation analyses were undertaken to examine the second hypothesis, that the relationships between SL and burnout and work engagement would be indirectly influenced through the impact of leadership on worklife characteristics. Mediation models were tested using bootstrapping techniques, providing a more powerful test of mediation than a 'normal theory' approach (Hayes & Rockwood, 2020). Examination of the second hypothesis, using the bootstrapping technique to generate 5000 samples, provided limited support for the mediating effect of worklife characteristics on the relationship between SL style with burnout and work engagement. Some support for this hypothesis was revealed for the relationship between SL style and the burnout dimension, emotional exhaustion. However, no support was found for a significant mediating effect of worklife characteristics on either depersonalisation, personal accomplishment, or work engagement levels among staff with these results failing to reach significance levels.

The findings do, however, suggest preliminary support indicating that the relationship between a SL style and the burnout subscale emotional exhaustion is influenced through the leader's impact on worklife characteristics. A close inspection of the indirect effects for each of the six characteristics of worklife (workload, control, reward, community, fairness, values)

individually, however, did not reveal significant indirect effects for any of the worklife characteristics separately. The findings did provide support for the indirect effect of the overall worklife characteristics on the relationship between a SL style and emotional exhaustion, however. These findings therefore indicate that a SL style influences emotional exhaustion among staff, through the leader's influence on the work environment.

There is a limited research base to which to compare these findings as this is the first known study to examine worklife characteristics, as a mediator in the relationships between SL and burnout and work engagement among staff in secure mental health settings. The findings do, however, add to the research base suggesting that SL style can exert a positive influence on the well-being of staff working within mental health settings (der Kinderen et al., 2020). More broadly, the current findings reveal similar patterns to those found in another study (Laschinger et al., 2015), undertaken with authentic leadership, a leadership style also described as relationally focussed (Cummings et al., 2018), and one which is asserted to overlap with a SL style (Hoch et al., 2018).

In Laschinger et al. (2015), an authentic style of leadership was shown to have a positive impact on staff well-being through the leader's impact on worklife characteristics. In this earlier study, overall worklife characteristics was shown to be a significant mediator in the relationship between leadership style and burnout among nurses. It is noteworthy, however, that in Laschinger et al. (2015) only the overall worklife characteristics score was used to examine its role as a mediator, rather than each of the six sub dimensions separately. Furthermore, Laschinger et al. (2015) included additional mediators in the path between the leadership style and burnout, whereas the current study did not.

Although the dearth of research makes direct comparison difficult between the current study and earlier studies, the findings do provide some initial insights into potential mechanisms through which managers, perceived as exhibiting qualities reflecting a SL style may influence the psychological well-being of staff working in secure mental health contexts.

Limitations

Notwithstanding some of the contributions made by the current study, there are several limitations to consider. First, the study is a cross-sectional design which precludes causal conclusions regarding the associations found between SL style with burnout and work engagement, and the indirect effect of worklife characteristics. According to Eva et al. (2019), experimental designs should be adopted to reduce the potential for endogeneity, since correlational designs are likely to omit other explanatory variables. Taking these points into account, the current study is likely to have omitted variables and/or not accounted for the effects of other unknown confounding variables. However, while experimental designs do permit drawing causal conclusions, Nelson et al. (2014) argue that an expectation for experimental designs within all psychological research is unrealistic. Given the challenges to conducting experimental designs within 'real world' research, a longitudinal design would help to draw inferences over time.

Second, the current study relies on self-report measures, increasing the potential for self-reporting bias. Using multiple methods and including information from those in leadership positions may contribute to reducing common method bias. Using self-report measures requires the participant sample to reflect the actual population of interest, however, individuals experiencing high levels of burnout and stress may be less motivated or have limited capacity to participate in research. Furthermore, given that high stress is associated

with staff absence from work (Oates et al., 2021), it is possible that staff experiencing higher levels of burnout were absent from work during the research project. In considering this potential for sampling bias, however, it is notable that the mean sample score for emotional exhaustion in the current study fell within the 'high' range. However, it is also acknowledged that this was the only burnout sub dimension deemed to be 'high' in the current study sample.

Additionally, the present study consists of a relatively small sample size. Initially, there were two secure healthcare providers who confirmed an interest in participating in this research study, however due to the Covid pandemic, one of the providers withdrew their interest. Attempts were made to increase participant numbers by approaching a further secure healthcare provider, however, this could not be completed within the necessary timeframe of the research project. As a result of the small sample size, the mediation analysis could only detect large mediation effects (Fritz & McKinnon, 2007).

Whilst the response rate for the current study was relatively high, there are likely to have been a larger number of participants who were exposed to the research advertising. As discussed, it is possible that those participants who were experiencing very high levels of stress may have been less likely to participate and may contribute to explaining the small sample size. Given that the research and recruitment took place within the context of the Covid-19 pandemic, stress and absence among staff is likely to have been higher during the period of recruitment. These factors may have impacted upon the motivation and time resources available to potential participants to take part in the study.

It is crucial therefore, to acknowledge that the results of the current study are likely to have been influenced by a number of factors, including the Covid pandemic. Given that the study was undertaken, during an incredibly unique period within healthcare services, the

nature of the healthcare work climate, and the experiences of staff during the pandemic, are likely to have impacted on the findings.

Furthermore, the measure of SL used in the current study was an overall global scale, which makes it difficult to break down and explore different facets of this leadership style, such as any potential underlying mechanisms within the construct itself. This is an important consideration given the criticisms noted earlier in relation to the Ehrhart (2004) SL measure lacking content validity, thus possibly not relating to other constructs it should be related to (Koller & Gluck, 2017). These arguments may contribute to explaining a lack of significant interrelationships between SL style and depersonalisation, personal accomplishment, and work engagement through the work environment.

Finally, there is an ongoing debate within the research literature in terms of the best approach for testing mediation effects. Some have argued for a traditional causal step approach which seeks to explore partial and full mediation, however, others suggest this is lower in power and is not a prerequisite for demonstrating mediation (Hayes, 2013). Additionally, Hayes and Rockwood (2020) suggest that bootstrapping is a more powerful tool and can be used with smaller samples. In contrast, Nelson et al. (2014) argue that bootstrapping should only be undertaken with large samples. It is, therefore, possible, that the mediation analyses tool used was not sufficient for the size of the current sample, although this decision was guided by the literature (Fritz & Mckinnon, 2007). It is also important to acknowledged more generally, that the nature of the current study was exploratory, and as such, it is limited in being overly led by prior research literature.

Implications

While limitations of the study have been outlined, the current findings do contribute to an emerging empirical research base which seeks to explore and understand some of the underlying mechanisms through which a SL style may influence the psychological well-being of staff. The present study adds to this literature base in demonstrating the positive influence of SL on emotional exhaustion among staff through the leader's influence on worklife characteristics. Additionally, this research study contributes something unique as it is the first known study to explore these interrelationships with staff working in *secure* mental health contexts, thus providing new insights into the interrelationships between a SL style, psychological well-being, and the working environment.

The results also contribute to the argument that leadership styles which are more servant-oriented are conducive to increasing staff well-being and positive organisational outcomes (der Kinderen et al., 2020). Furthermore, the findings add to the wider empirical literature which has shown that leaders who prioritise relationships have a positive influence on staff well-being, through the leader's positive impact on the work environment (Laschinger et al., 2015). These findings also contribute meaning to both theory and practice when considering the assertions of Greenleaf (1977) that due to servant leaders prioritising the well-being of 'followers', they promote a more 'effective' workforce (Ehrhart, 2004; Neubert et al., 2016). Although the aim of the current study was not to define or measure the 'effectiveness' of SL, these assertions align with West et al.'s (2017) position that 'effective' leaders are those who prioritise the needs and development of others.

While the current study did not demonstrate significant indirect effects for all the burnout dimensions and work engagement, it did highlight the beneficial impact of a SL style on emotional exhaustion among staff working in secure mental health settings. These results

have important implications for practice in complex mental health environments, when considering the particularly high levels of staff stress and burnout identified in forensic mental health settings (Oates et al., 2021). Given the links between stress, staff turnover, and poor care provision within these settings outlined earlier (Oates et al., 2021), it is vital to continue to elucidate an understanding through empirical research of the factors which are associated with improving staff well-being.

According to O'Connor et al. (2018), interventions which aim to reduce burnout amongst staff need to consider the potential indirect effect of leadership on staff well-being, through their impact on characteristics of the work environment. The current findings do point to the important role that a servant leader may play in shaping staff well-being and the work environment. In terms of understanding how SL qualities may be developed and learned, a social learning approach (Bandura, 1977), indicates that staff who are supervised or managed by a leader high in SL qualities will learn those qualities through observing the leader's treatment of others (Neubert et al., 2016). This suggests that staff learn and are influenced positively through observing what the manager does, rather than only through formal teaching methods. For managers to develop and display these SL qualities however, it is likely they would benefit from training and interventions which promotes and supports these qualities.

Given the relatively limited literature base, further empirical research will be required to draw firmer conclusions about the influence of a SL style, and the interrelationships with staff well-being and the work environment, to inform the development of leadership training and development. Furthermore, as Neubert et al. (2016) proposed, leadership does not operate in a vacuum, and there are many factors that need to be considered when trying to understand

the impact of the leader on staff well-being. This position is also supported by Hearld and Clarke (2019) who suggest a different pattern may emerge across different work contexts.

These ideas contribute to a consideration of the important role of the systems within which leadership operates. For instance, it may be more difficult to apply qualities associated with a SL style within healthcare organisations and workplaces which prioritise tasks over relationships, which is at odds with a SL approach. In these settings, qualities associated with a SL style may be undervalued, dismissed and/or discouraged to get the 'task done'. Additionally, it may take time to develop SL qualities, and to build the relationships required for staff to trust their manager and emulate the attitudes, values and behaviours of a SL style.

Support for the moderating role of the work environment on the relationship between a SL style and staff well-being, revealed that a SL style had a more positive influence on staff when workplace civility was high (der Kinderen et al., 2020). Future research will therefore need to explore and examine some of the potential organisational moderators, to develop a more informed understanding of the underlying dynamics and processes surrounding a SL style, and how and when it influences staff and workplace outcomes.

Recommendations

In terms of recommendations, first, further research should expand upon the limited literature base by developing studies in diverse mental healthcare settings with diverse samples since much of the literature surrounding leadership and staff well-being has been undertaken in general healthcare services. Expansions of the research base should therefore include mental healthcare settings and staff, particularly, since as discussed, staff burnout and turnover are particularly high among mental healthcare staff groups (West et al., 2017).

Initially, it would be advisable to repeat the present study with a larger sample, given the arguments, the sample size was too small for bootstrapping techniques used in the current study (Nelson et al., 2014). Additionally, it would be informative to develop a study which explores the interrelationships between a SL style, well-being and the work environment that compares these across different healthcare settings, to examine if these interrelationships are shaped differently according to the specific general and mental healthcare contexts.

In addressing some of the limitations noted within the current study, in terms of being unable to draw causal inferences, future longitudinal studies would be beneficial. Furthermore, longitudinal designs which utilize multiple time points for repeated measures may capture some of the underlying dynamics and processes which appear relatively unexplored. Additionally, drawing upon diverse methodologies and data collection methods may also contribute to the literature base which is largely correlational in design (Neubert et al., 2016). These recommendations may go some way to addressing the limitations outlined regarding the reliance on self-reporting, particularly if mixed methods studies are also adopted.

Finally, considering some of the criticisms highlighted surrounding the use of Ehrhart's (2004) servant leadership measure, future research might seek to include additional and/or alternative measures of servant leadership which have undergone more rigorous validation and construction (Eva et al., 2019). However, as Eva et al. (2014) point out, the measures should also be selected based on how well they fit with the specific aims of a particular research study.

Conclusion

The current study concords with similar research showing positive interrelationships between SL style, the work environment, and the well-being of staff. It is not possible to directly compare the findings, however, due to a limited literature base within secure mental health settings. Given, the repeated failings discussed within healthcare settings, calls for leadership change, and the recent addition of the Covid pandemic, it is crucial and timely to develop an understanding of the leadership styles and practices which can contribute positively to staff, their workplaces, and patient outcomes. To develop and promote 'effective' leadership qualities within mental healthcare organisations, this will need to be first underpinned by a comprehensive empirical research base which can aid understanding, decision making and development frameworks going forward.

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Press Release: Literature Review

Leaders in organisations have often been described as either focussed on tasks or focussed on people. Experts suggest that when healthcare managers prioritise relationships with people over task performance, staff, and their workplaces are likely to benefit (Cummings et al., 2018). However, less is known about the impact of relationship focussed leadership within mental health settings, something which a recent review set out to examine. The results conclude, within mental health settings, staff, and the workplace benefit from servant and transformational leadership styles, both of which focus on building relationships with staff.

Experts have claimed, healthcare managers who display characteristics associated with either servant or transformational leadership styles, have a positive impact on the workforce and work environments (Cummings et al., 2018). These leadership styles are expected to impact staff and workplaces positively, through showing concern and support for staff. These findings are important for both healthcare professionals and the wider public, and need to be considered in terms of the failures and scandals reported within UK healthcare services. These have included poor care practices, highlighted by the Francis Inquiry (2013) into the Mid Staffordshire NHS Foundation Trust, and, more recently, the Ockenden Report (2020) surrounding maternity care provision in the Shrewsbury and Telford Hospital NHS Trust. Repeatedly, there have been calls for healthcare leadership change.

The challenges for healthcare services and staff are highlighted by reports of workforce shortages, together with overstretched, and overwhelmed staff (de Zulueta, 2015; Greenberg et al., 2020; Salmond & Echevarria, 2017). Staff who work in mental health services are said to be particularly vulnerable to stress and feeling overwhelmed (Jenkins & Elliott, 2004; O'Connor et al., 2018). What is clear, however, is that the leadership approach

incorporated within healthcare services, can help to reduce the impact of stress on staff within these challenging work environments. Unfortunately, there have been no reviews which focus on the various forms of leadership approaches which prioritise relationships over tasks in mental health settings, until now.

The review set out to examine all research published, that had attempted to identify how four styles of relationship focussed leadership (authentic, ethical, servant, transformational), influenced a range of outcomes within mental health settings. However, only papers for two (servant and transformational) leadership styles were identified, therefore, the review examined published research which explored the impact of servant and transformational leadership styles on staff, the workplace, and working practices, in mental health organisations. Providing answers to these questions, the review was able to determine what the research could tell us, about the impact of these leadership styles in mental health services. Alongside this, the quality of the research was also evaluated.

Similar patterns were found in this review to those carried out in other healthcare research, showing servant and transformational leadership styles bring positive benefits to healthcare organisations (Cummings et al., 2018). It was surprising that authentic and ethical leadership research could not be identified, and that only one paper could be found for servant leadership. It was also interesting that some studies showed that the positive influence servant and transformational leadership styles exert, are not straight forward, and may depend on a number of other factors. To increase knowledge and understanding of these other factors, further exploration is needed.

Reviewing the quality of the studies, showed that some of the papers, failed to discuss important information about the background of staff who took part in the research. Several of

the studies also failed to describe how staff were recruited. This is where more research is needed, and, in the future, research will benefit from including a range of mental health settings and staff from different professions.

Overall, the review recommends it is vital to develop training and resources within mental health services, for managers and staff to understand and promote qualities of transformational leadership, while continuing to build research on authentic, ethical, and servant leadership styles, within mental health services.

The research was undertaken as part of the Forensic Clinical Psychology Doctorate at the University of Birmingham.

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Press Release: Empirical Research

In mental health settings, experts have stated that when managers display qualities of a servant leadership style, the manager is able to contribute to healthier staff and workplaces (Neubert et al., 2018). A new study set out to examine this claim with staff who work in secure mental health settings. The findings conclude that a servant leadership style can impact on the well-being of staff and their work environment in a positive way. Importantly, the findings also show some evidence that managers with servant leadership qualities, support the well-being of staff, through the leaders' positive influence on the workplace.

Experts in the field have consistently shown, when leaders possess the qualities that are associated with a servant leadership style, healthcare staff, and healthcare workplaces benefit (Cummings et al., 2018). These qualities, include a focus on building relationships with the workforce and prioritising the needs and well-being of staff (Wong et al., 2013). According to experts, this style of leadership is expected to promote staff well-being and reduce the impact of stress and burnout on the workforce (Cummings et al., 2018; Wong et al., 2013). These are important statements, as it has been shown that lower levels of psychological well-being among staff who work in mental health settings, is linked to higher staff turnover and poorer healthcare quality (West et al., 2017).

Staff who work in mental health settings are particularly vulnerable to increased levels of stress due to the nature of the work environment, such as working with distressing material (Oates et al., 2021). The potential for experiencing stress is said to be even greater in secure mental health settings, this is due to the ongoing risk of physical violence and harm to staff (Oates et al., 2021). Little is known however about the impact of a servant leadership style on staff and workplace outcomes in these more challenging mental health workplaces. This is

important to understand, since managers, who demonstrate servant leadership qualities, appear to play a vital role in promoting healthy staff and workplaces (Neubert al., 2018).

A new study aimed to examine how a servant leadership style would impact on staff and the workplace, within secure mental health settings. To do this, staff were asked to complete an online survey with several questionnaires. They were asked to rate their line manager, on how well they thought their manager reflected servant leadership characteristics. Staff were also asked to complete questionnaires about their own psychological well-being (measuring burnout and work engagement levels), and to rate characteristics of the work environment. The responses from the survey were then analysed.

The results showed that when staff rated their managers higher on servant leadership qualities, staff were also more likely to report positively on their own psychological well-being, and the work environment. There was also some evidence to suggest, that the positive impact of the managers style of leadership on staff well-being, was due to the positive impact they also had on the work environment. However, the results were not conclusive, and future research is therefore required.

The findings of the study offer an opportunity to increase knowledge and understanding of important leadership qualities, which are necessary for contributing to healthy staff and workplaces. However, as Neubert et al. (2018) suggests, leadership does not operate in isolation, and there is a need for future research, to learn more about how servant leadership style qualities can create positive change within these challenging work environments. The review concludes by offering suggestions for the future training and development, of effective leaders within mental health settings.

The research was undertaken as part of the Forensic Clinical Psychology Doctorate at the University of Birmingham.

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Appendices

Appendix A - Sponsorship Confirmation

UNIVERSITY OF BIRMINGHAM
FINANCE OFFICE

[redacted]
School of Psychology
University of Birmingham

Wednesday, 30 September 2020

Dear [redacted]

Project Title: **Servant Leadership and Psychological Well-Being: The Mediating Role of Worklife**
IRAS ID: **276913**
Sponsor Reference: **RG_19-244**
UoB Ethics Reference: **ERN_19-1846**

Under the requirements of UK Policy Framework for Health and Social Care Research, the University of Birmingham agrees to act as Sponsor for this project. Sponsorship is subject to you obtaining a favourable ethical opinion, HRA approval and NHS R&D management approval where appropriate.

As Chief Investigator, you must ensure that local study recruitment does not commence until all applicable approvals have been obtained. Where a study is or becomes multi-site you are responsible for ensuring that recruitment at external sites does not commence until local approvals have been obtained.

Following receipt of all relevant approvals, you should ensure that any subsequent amendments are notified to the Sponsor, REC, HRA and relevant NHS R&D Office(s), and that an annual progress report is submitted to the Sponsor, REC and NHS R&D departments where requested.

Please ensure you are familiar with the University of Birmingham Code of Practice for Research (http://www.birmingham.ac.uk/Documents/university/legal/research.pdf) and any appropriate College or School guidelines.

Finally please contact researchgovernance@contacts.bham.ac.uk should you have any queries.

You may show this letter to external organisations.

Yours sincerely

[redacted]

Appendix B - HRA Ethical Approval

Ymchwil Iechyd a Gofal Cymru
Health and Care Research Wales

NHS
Health Research Authority

Mrs Deanna Doherty
[redacted]

Email: approvals@hra.nhs.uk
HCRW.approvals@wales.nhs.uk

22 October 2020

Dear Mrs. Doherty,

[redacted]

HRA and Health and Care Research Wales (HCRW) Approval Letter

Study title:	**Servant Leadership and Psychological Well-Being: The Mediating Role of Work Environment.**
IRAS project ID:	**276913**
Protocol number:	**ERN 19 1846**
Sponsor	**University of Birmingham**

I am pleased to confirm that HRA and Health and Care Research Wales (HCRW) Approval has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?
HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Appendix C - Demographic Questions

1. Your gender?
   I Identify as Male /Female /Other (please state) _____ / Prefer not to say

2. Which category below includes your age?
   18-20 /21-29 /30-39 /40-49 /50-59 /60 or older /Prefer not to say

3. What is your profession?
   Nurse /Psychologist / Social Worker /Medical Doctor
   Occupational Therapist /Support Worker /Healthcare Assistant/Assistant Psychologist
   /Other (please state) _____ /Prefer not to say

4. Work unit?
   Child /Adult /Learning Disability /Other (please state) _____
   /Prefer not to say

5. How long have you worked in healthcare?
   3-6 months /7-11 months /1-2 years /3-5 years /6-10 years
   /11-15years /16-20 years /21+ years

6. How long have you worked in your current post?
   3-6 months /7-11 months /1-2 years /3-5 years /6-10 years /11-15years /16-20 years
   /21+ years

7. How long have you worked under your current line manager?
   3-6 months /7-11 months /1-2 years /3-5 years /6-10 years /11-15years /16-20 years
   /21+ years

Appendix D - Mixed-Methods Appraisal Checklist

Screening questions • S1 Are there clear research questions? • S2 Do the collected data allow to address the research questions?	Yes/No/Can't tell/Comments
Quantitative descriptive • 4.1 Is the sampling strategy relevant to address the research question? • 4.2 Is the sample representative of the target population? • 4.3 Are the measurements appropriate? • 4.4 Is the risk of nonresponse bias low? • 4.5 Is the statistical analysis appropriate to answer the research question?	Yes/No/Can't tell/Comments
Mixed methods study • 5.1 Is there an adequate rationale for using a mixed methods design to address the research question? • 5.2 Are the different components of the study effectively integrated to answer the research question? • 5.3 Aare the outputs of the integration of qualitative and quantitative components adequately interpreted? • 5.4 Are divergences and inconsistencies between qualitative and quantitative results adequately addressed? • 5.5 Do the different components of the study adhered to the quality criteria of each tradition of the methods involved	Yes/No/Can't tell/Comments