Examining the Role of Transformational Leadership and Mission Valence on Burnout Among Hospital Staff

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Abstract

Aim. The present study contributes to our understanding of how to curb burnout among hospital staff over time. We extend existing research by examining the mediating role of mission valence in the link between transformational leadership and burnout.

Method. Self-administered questionnaire data from employees in a Canadian general hospital (N = 185) were analyzed using a time-lagged research design to examine whether transformational leaders can increase employees' attraction to the organization's mission (i.e., mission valence), and in turn alleviate long term burnout.

Findings. Structural equation modelling analysis demonstrated that transformational leadership (time 1) was negatively related to the burnout components of emotional exhaustion and depersonalization (time 2). Further, the results showed that mission valence mediated these relationships.

Conclusion. The study findings are important for managers and professionals as they identify transformational leadership as a potent strategy to alleviate employee burnout and clarify the process through which this is achieved, namely, by increasing mission valence.

Originality. To date, surprisingly little research has explored *how* transformational leadership influences followers' burnout. To address this issue, the present study examined the role of transformational leadership on staff burnout through the mechanism of increasing mission valence. Understanding how to mitigate burnout is particularly critical in health care organizations given that burnout not only negatively impacts employee wellbeing but also the wellbeing and quality of care provided to patients.

Keywords: Transformational leadership; mission valence; wellbeing; burnout; health care

Introduction

Healthcare systems across developed countries are facing serious fiscal sustainability as well as social sustainability challenges (e.g., Mohrman & Shani, 2014). Specifically, healthcare professionals are confronted with increasingly pressurized work environments because of per capita funding cuts, radical organizational change, and a growing demand for healthcare services (Schmidt et al., 2017). These challenges require effective change leaders who can implement sustainable fiscal measures while supporting staff in the process to prevent or at least alleviate burnout. The problem of burnout remains particularly urgent due to the current COVID-19 pandemic. While almost all spectrums of society have been severely disadvantaged, perhaps no profession has been hit harder than health care staff, who are on the front-line of the pandemic response (Caldas et al., 2020). The "COVID-19 pandemic has caused an unprecedented challenge for healthcare systems worldwide" (Nicola et al., 2020, p. 188), with health care workers attending to COVID-19 patients being particularly vulnerable to burnout and mental health problems (Lai et al., 2019). Indeed, health care professionals are facing both the indirect trauma of their patients and families as well as the direct threat from the virus that might harm themselves as well as their loved ones (Caldas et al. 2020). Existing daily job demands such as long working hours, time pressure, and high workloads (Lai et al., 2019) are now exacerbated by new unique demands associated with the pandemic including having limited access to personal protective equipment, making life prioritizing decisions due to supply shortages, and exposure to COVID-19 patients, all of which provide a breeding ground for burnout (Morgantini et al., 2020). Given the increased relevance burnout and due to the inextricable link between the wellbeing of staff who provide care and the patients they provide for (e.g., Cimiotti et al., 2012), tackling staff burnout should be a priority for leaders. One leadership style believed to be particularly effective for alleviating employee burnout during organizational change is transformational leadership (Breevaart et al., 2014). In the

present research, we therefore focus on transformational leadership. In fact, transformational leadership has been positioned as the solution to many of the aforementioned challenges while also being considered an essential part of effective management for creating a culture of patient safety (e.g., Institute of Medicine (US), 2004).

Accordingly, the research questions of the present study were twofold: First, is transformational leadership negatively associated with burnout among health care staff? Second, which levers can transformational leaders avail of to alleviate burnout? To this end, we proposed and tested a specific lever that transformational leaders can harness to alleviate burnout, that is, mission valence. Mission valence is defined as the perceived attractiveness of an organization's purpose (Wright et al., 2012). We argue that transformational leaders can alleviate burnout by making an organization's mission more attractive and salient. This lever should be particularly powerful in hospitals which have social-oriented missions. Our study responds to a recent call for research to investigate the relationship between transformational leadership and mission valence (Caillier, 2016). Crucially, we extend previous research on this topic, which has largely focussed on job attitudes and performance as outcomes (Caillier, 2014; 2016; Pandey et al., 2008), by attending to a health-related outcome, that is, burnout as "an important end-state in its own right" (Maslach & Leiter, 2017, p. 49). According to the authors' knowledge, no study has yet examined whether health care leaders can help mitigate employee burnout through mission valence – that is, making the organizational mission more engaging, meaningful, and attractive in the eyes of employees, which is expected to help them better cope with a demanding and stressful environment. Using a time-lagged research design with health care professionals in a Canadian hospital, we examine the impact of employees' perceptions of transformational leadership on burnout experienced three years later. We also examine the mediating role of mission valence in this relationship.

The Health Care Context

Burnout among health care professionals is a major problem around the world and it is rising at an accelerating rate (e.g., National Academies of Sciences, Engineering, and Medicine [NASEM], 2019). A recent survey in the Canadian health care sector revealed that over 40% of nurses reported burnout (McLeod, 2019). Burnout among healthcare professionals is associated with reduced patient satisfaction (Vahey et al., 2004) and impaired quality of patient care (Poghosyan et al., 2010). Therefore, scholars have called for research on effective strategies to reduce it (Boudrias et al., 2012; Holland et al., 2013). Among Canadian health care workers, we seek to investigate the role of leadership, in particular transformational leadership, as a potential leadership style that may assist in alleviating burnout and in so doing explore the underlying mechanisms involved. The Canadian Department of Health has promoted transformational leadership as the style of leadership, which will enable the successful restructuring of the Canadian healthcare system (Arnold et al., 2007). The hospital in which the investigation is carried out is part of the West Island Health and Social Services Centre (HSSC) in Canada and is part of the network of health promoting hospitals affiliated with the World Health Organization. In the following sections, we explain the theoretical background and hypotheses before moving to the methods and analyses employed, results and discussion.

Theory and Hypotheses

Transformational Leadership and Burnout

Transformational leaders inspire their followers to go beyond self-interest by aligning employee values with those of the organization and motivating them to go beyond what is expected of them (Bass, 1985; Yukl, 1999). Despite the strong emphasis on this constructive leadership style in the literature (Bass, 1985; Bass & Avolio, 1990; Breevart et al., 2014; Yukl, 1998), consensus is somewhat lacking regarding the number of dimensions comprising transformational leadership (Schippers et al., 2008) except for:

Charisma/inspirational motivation, individualized consideration, and intellectual stimulation. Charisma/inspirational motivation implies that leaders articulate a compelling vision, set high expectations of followers with the aim for them to reach this vision, and act as a role model to their followers. Individualized consideration is concerned with the leader acting as a mentor and coach and paying attention to followers' individual needs and development. Intellectual stimulation entails encouraging followers to engage in critical thinking and to adopt new perspectives as well as empowering them to make their own decisions. Considering these dimensions, it can be concluded that transformational leadership is a "valuable resource in followers' work environments" (Breevaart et al., 2014, p. 107) and has an important influence on follower well-being. Recently, Schaufeli (2015) extended the popular Job Demands-Resources Model (JD-R; Demerouti et al., 2001) to integrate leadership into its model and examined the "direct and indirect effects of leadership – through demands and resources - on burnout and work engagement" (p. 446). While most JD-R research combined leadership with other resources into a single latent construct, Schaufeli (2015) stresses the importance of studying leadership styles in their own right given that leaders are influential in allocating job demands and job resources to their followers. The present study builds on the extended JD-R model (Schaufeli, 2015) and investigates the specific impact of transformational leadership. Transformational leaders foster a favorable work environment (Piccolo & Colquitt, 2006) and in doing so, activate the motivational process of the JD-R model that can foster other valuable resources (i.e., mission valence), thereby improving work-related engagement and curbing burnout.

Burnout, a form of employee ill-being/stress, is "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, p. 397). In particular, the presence of high demands and low resources contributes to this state of mental weariness which manifests itself in the form of emotional exhaustion, depersonalization, and reduced

personal accomplishment (Leiter & Maslach, 1988). In the present study, we focus on emotional exhaustion and depersonalization as they represent the core dimensions of burnout (e.g., Bakker et al., 2003; Demerouti et al., 2001). Emotional exhaustion reflects a state in which emotional and energetic resources are being depleted (Maslach et al., 2001). Depersonalization (or cynicism) refers to a detached and cynical attitude toward one's job and those associated with it (e.g., patients, co-workers) (Halbesleben & Buckley, 2004). Health care professionals are particularly prone to burnout due to a host of environmental challenges including high patient-to-staff ratios, increased workload, lack of social support (Felton, 1998), the intense nature of contact with patients (Demerouti et al., 2000), and the continuous struggle of balancing self-care with care for others (Skovholt et al., 2001). Leaders can positively shape followers' perceptions of such core job characteristics (Picollo & Colquitt, 2006) and they have a profound influence on followers' emotions (Bono et al., 2007) and performance-related outcomes (Aryee et al., 2012). Despite their crucial role in followers' well-being (Kelloway et al., 2012; Nielsen et al., 2009), surprisingly little research to date has been devoted to the role of leadership in followers' burnout (Breevaart et al., 2014; Den Hartog & De Hoog, 2009). Findings from those few studies suggest that transformational leadership is negatively related to job stress and burnout (Corrigan et al., 2002; Gill et al., 2006; Densten, 2005; Hetland et al., 2007; Kanste et al., 2007; Leithwood et al., 1996; Mazur & Lynch, 1989; Seltzer et al., 1989; Stordeur et al., 2001; Webster & Hackett, 1999). For example, cross-sectional research on health workers demonstrated a negative relationship between transformational leadership and staff burnout in mental health service teams (Corrigan et al., 2002) and community mental health agency teams (Webster & Hackett, 1999) as well as the protective role of transformational leadership from nurses developing depersonalization (Kanste et al., 2007). Given that "transformational leadership is a motivational leadership style that initiates a motivational process" (Breevaart et al., 2014; p. 108), it is not surprising that it was found to

be more strongly related to followers' motivation (i.e., reduced depersonalization) than to followers' level of energy (i.e., reduced emotional exhaustion; see Hetland et al., 2007; Kanste et al., 2007). Hence, we expect a negative relationship between transformational leadership and burnout (i.e., emotional exhaustion; depersonalization) in the present research.

Transformational Leadership and Mission Valence

Transformational leadership is considered influential in public service and health care contexts, because it articulates a higher order purpose in service of a larger community and stimulates the growth and self-actualizing needs of followers (Bono & Judge, 2003; Zaccaro, 2001). Such leaders emphasize the significance of the organizational goals and how follower actions contribute to these and the wider mission, thereby motivating their followers to work hard and beyond their own self-interest (Boswell, 2006; Paarlberg & Perry, 2007). Importantly, recent evidence suggests that transformational leadership can enhance mission valence (e.g., Caillier, 2016; Wright et al., 2012).

Mission valence is defined as an "employee's perceptions of the attractiveness or salience of an organization's purpose or social contribution" (Wright et al., 2012, p. 206). The term originated from Rainey and Steinbauer (1999) who, together with other scholars (e.g., Goodsell, 2012), posited that an attractive and worthwhile organizational mission could energize employees and contribute to the attraction and retention of talent. Although many public service employees including hospital staff are likely to find the missions of their organizations attractive because they are aligned with their prosocial values and desire to help others (e.g., Brewer, 2003; Freeney & Fellenz, 2013), transformational leaders can further enhance employee mission valence (e.g., Paarlberg & Lavigna, 2010; Wright et al., 2012) by appealing to their "identities and end values, infus[ing] their tasks and roles with an ideological meaning and purpose, and emphasize collectivistic norms such as social responsibility, service and altruism" (Shamir & Howell, 1999; p. 268).

Leaders who transform their followers' values and commitment to the organization's mission typically demonstrate certain characteristics or behaviors (Bass & Avolio, 1990; Paarlberg & Lavigna 2010). These include inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration. For example, transformational leaders can articulate an inspiring organizational vision that arouses strong follower emotions. They align employee values and the organization's ideology "by articulating an organizational mission that clearly reflects individual prosocial values, using values to guide the onboarding process, setting clear and significant goals, and designing work in a way that maximizes social significance" (Paarberg & Lavigna, 2010, p. 711). To help followers achieve the vision, these leaders also need to lead by example and act as prosocial role models (Shamir, et al., 1993), showing consistency between their words and deeds (Avolio & Gardner, 2005). They instil employee confidence and pride in their organization (Wright et al., 2012). Transformational leaders further encourage their followers to challenge the status quo, think for themselves, and take initiative (Bass & Avolio, 1990). Such empowerment can increase not only their motivation to deliver effective public service but also mission valence (Park & Rainey, 2008). Finally, transformational leaders provide followers with the skills and tools, which are critical for the empowerment and personal growth of employees (Paarlberg & Lavigna, 2010. By demonstrating these behaviors, transformational leaders can increase the attractiveness of the mission in employees' view and their commitment to it (Bass & Riggio, 2006). Consistent with these expectations, recent research in a government context in the US also found that transformational leadership was positively related to employee mission valence (e.g., Caillier, 2016; Wright et al., 2012). The present study seeks to build on this empirical evidence and our theoretical arguments presented above in order to test the relationship between transformational leadership and mission valence among health care employees in a Canadian hospital. Hence, we hypothesize:

Hypothesis 1: Transformational leadership will be positively related to employee mission valence.

Mission Valence and Burnout

Mission valence has been demonstrated to have motivating properties. For example, Caillier (2016) found that transformational leaders enhanced mission valence, which in return, increased extra-role behaviors and reduced turnover intentions. Mission valence might also act as a protecting factor against employee burnout. Given that the stressors and demands faced by health care workers are not expected to dissipate (Boudrais et al., 2012; Townsend & Wilkinson, 2010), the identification of potential factors that might prevent burnout is critical. Scholars have called for research to consider organizational-level variables (e.g., senior leaders, vision clarity, mission) to help advance our understanding of meaningfulness, engagement and well-being at work (Albrecht, 2010). In the mind of employees, an organization's purpose or social contribution is attractive and salient to the extent that the organizational goals are clear, meaningful, and important (e.g., Chun & Rainey, 2005; Weiss & Piderit, 1999; Wright & Pandey, 2011). Similarly, other scholars have suggested that providing individuals with a sense of meaning and purpose should reduce burnout (e.g., Boudrias et al., 2012; Hochwälder, 2007), whereas the loss or lack of it can lead to existential frustration and ultimately burnout (Jourdain & Chênevert, 2015). This may be especially the case among health care workers who are viewed as caring and compassionate. Indeed, the prosocial impact that employees feel from working towards a meaningful vision and mission, can protect against daily hassles and emotional exhaustion (Bakker, 2015; Grant & Sonnentag, 2010). Thus, the more an organizational mission is perceived to be socially purposeful, engaging, meaningful, and attractive, the more it can be expected to reduce employees' burnout.

In contrast, recent research by Van Loon et al. (2015) found that, for employees with strong prosocial values, ample opportunities to contribute to society in people-changing

institutions (e.g., hospitals, schools) depleted their capabilities and resources, eventually leading to burnout. It appears logical to conclude that a very attractive and purposeful mission which is 'lived' by local leaders might similarly encourage employees to go 'above and beyond the call of duty' (Dilulio, 1994; p. 281) and sacrifice their self-interest for the greater societal good, particularly so for employees with prosocial values (van Loon et al., 2015). In doing so, overcommitted and overstretched employees might deplete their resources and risk burnout in the long-term. In short, the relationship between mission valence and burnout has a theoretical and empirical foundation in both directions. However, no studies to date have explicitly studied the relationship between mission valence and long-term burnout. Empirical evidence on related literature pertaining to inspirational motivation, meaningfulness, and prosocial values is inconclusive. The bulk of research however suggests a negative relationship between mission valence and burnout in the form of emotional exhaustion and depersonalization. Hence, we propose that:

Hypothesis 2: Employee perceptions of mission valence will be negatively related to burnout in the form of (a) emotional exhaustion and (b) depersonalisation.

The Mediating Effect of Mission Valence

Transformational leadership is a valuable resource in the workplace since it has the potential to make work meaningful and challenging for followers (Breevaart et al., 2014). Prior research has indeed found that charisma/inspirational motivation is the most predictive transformational leadership dimension of burnout and job-related stress (Seltzer et al., 1989; Sosik & Godshalk, 2000). Transformational leaders thus have a powerful role in "setting the table" for beneficial employee and organization outcomes (Moynihan et al., 2011). Yet often this effect may be of an indirect nature with leaders first needing to shape the key underlying processes (Stordeur et al., 2001). Specifically, in terms of the JD-R model, good leaders create a positive work environment and manage job demands and job resources in ways that help

prevent burnout and increase work engagement (Shuck & Herd, 2012). Adopting a social learning approach to organizational behavior (Bandura, 1986), we argue that organizational stimuli (e.g., transformational leader behaviors) shape critical cognitive processes of organizational members (e.g., perceived attractiveness and salience of the organizational mission). These cognitive processes, in turn, will impact employee wellbeing (i.e., burnout). Given that such leaders transform their followers' values and stimulate them to transcend above immediate self-interest for the greater good of the organization and its goals (Yukl, 1999) by articulating a compelling organizational mission, we argue that the leader-influenced job resource of mission valence represents an important mediator in the relationship between transformational leadership and burnout. Hence, we predict:

Hypothesis 3: Mission valence will mediate the negative relationship between transformational leadership and burnout in the form of (a) emotional exhaustion and (b) depersonalisation.

Method

The present study employed a time-lagged design to examine the impact of transformational leadership on burnout via mission valence. The data was collected as part of a large-scale consultancy project for a Canadian hospital in which the hospital management was interested in learning about the effects of leadership and HR practices on employee attitudes and organizational outcomes. There was a time lag of three years between Time 1 and Time 2 data collection. Upon approval by the HR director of the hospital, employees received an invitation to participate in a survey on staff attitudes and the survey was sent by postal mail to their private addresses and the completed surveys were returned via postal mail to the research team. The paper and pencil survey contained an introductory letter co-signed by the HR Director and the research team; the latter stated the study purpose and informed participants about the confidential nature of the study. The research team contacted 1,802 employees in

2008 and 1,843 employees in 2011, which represented the hospital staff population at each time point. This procedure resulted in a usable sample of 530 in 2008 and 507 in 2011. In total, there were 185 matched respondents for Time 1 and Time 2, which represents an overall response rate of 10.1% of the overall population of hospital employees. This final sample was 93.5% female, with an average age of 45.99 years (SD = 9.59) and an average of 11.66 years of tenure (SD = 8.23). Of these participants, 70.8% were members of nursing or paramedical staff, and 64.8% were employed full-time. Reported education was 13.0% secondary or vocational school diploma, 27.6% college diploma, 13.0% undergraduate university degree, 37.8% bachelor, 8.1% masters, and 0.5% a doctoral degree, with 87.0% of hospital employees thus holding a post-secondary degree. No significant difference was evident in terms of the demographics of the final sample of respondents (N=185) and the hospital general population (N= 1,843).

To examine the possibility of non-random sampling caused by participant attrition from Time 1 to Time 2, we tested whether Time 1 respondents' (N = 530) probability of remaining in the final sample (N = 185) could be predicted by demographics and substantive variables measured at Time 1 (Goodman & Blum, 1996). The results of the logistic regression predicting the probability of remaining in the final sample using gender, age, job status, education, organizational tenure, as well as transformational leadership and mission valence as predictors were non-significant. This suggest that respondent attrition was essentially random.

Measures

The predictor variables used in the present study were transformational leadership and mission valence. The outcome variables were the burnout dimensions of emotional exhaustion and depersonalization. Employees' agreement with each statement was assessed on a Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7).

Transformational Leadership. We used nine high-loading items from the Multifactor Leadership Questionnaire (MLQ) Form 5X (Avolio et al., 1999) to measure transformational leadership at Time 1. We selected the three items with the highest factor loadings reported by Avolio et al. (1999) for the dimensions of charisma (idealized influence and inspirational motivation combined), intellectual stimulation, and individualized consideration. Idealized influence has been found in prior research to be highly correlated with inspirational motivation (Yammarino & Dubinsky, 1994). As a result, current research in the Bass model (Bass & Riggio, 2006) and associated measurement in the MLQ (Avolio et al., 1999; Bass & Avolio, 1995) typically quotes charisma (i.e., idealized influence and inspirational motivation combined), intellectual stimulation, and individualized consideration as the elements of transformational leadership to be measured (van Knippenberg & Sitkin, 2013). Examples of items are "My direct supervisor makes me aware of the importance of the organization's mission" (charisma), "My direct supervisor encourages me to see things from a different angle" (intellectual stimulation) "My direct supervisor focuses on my strengths rather than on my weaknesses" (individualized consideration). We created the scale 'Transformational leadership' by averaging participants' responses across the nine items. Internal consistency reliability was .93.

Mission Valence. The items to measure mission valence came from Guerrero and Chênevert (2020), who adapted the Kim (2012) measure to the Canadian public sector context. The items measured at Time 1 were (1) "I am inspired by the organizational mission"; (2) "What the organization seeks to offer in terms of services to the beneficiaries and the community stimulates me"; and (3) "I understand the role that I can play in the accomplishment of the organizational mission". Higher scores indicate that an employee (1) is attracted to and motivated by the organizational mission; (2) is positively aroused by the valuable service provided by the organization; and (3) perceives the connection between their work and the

fulfilment of that mission. Therefore, consistent with common definitions of mission valence (e.g., Rainey & Steinbauer, 1999; Wright & Pandey, 2011; Wright et al., 2012), our items reflect the degree to which employees experience a high-arousal positive affect (i.e., inspired, stimulated) by the organizational mission and the degree to which employees feel that the organization provides a valuable service that they can contribute to. Internal consistency reliability for this scale was .92.

Burnout. At Time 2, the two burnout dimensions of emotional exhaustion and depersonalisation were assessed via items from the Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach & Jackson, 1996). Five items each were used to assess emotional exhaustion and depersonalization. Examples of items are "I feel burned out from my work" (emotional exhaustion) and "I feel little enthusiasm for the work that I do" (depersonalization). Internal consistency reliability for the emotional exhaustion and depersonalization scales were .91 and .87, respectively.

Controls. We assessed different occupational groups to account for the fact that employees in some occupational groups might be particularly prone to stress and burnout (Schmid et al., 2011). These were included in form of 5 dummy variables with 1 coded as the respective occupational group and 0 coded as all other groups. The last occupational group was the reference group. The occupational groups were as follows: (1) Nursing and cardiorespiratory personnel; (2) Paratechnical, auxiliary service and trade personnel; (3) Office personnel; (4) Health and social services technicians; (5) Health and social services professionals; and (6) Managers and professionals.

Analyses and Results

To test our hypotheses, we followed a two-step process using structural equation modelling (Anderson & Gerbing, 1988) in Mplus version 6.0 (Muthen & Muthen, 1998 – 2017)

with Maximum Likelihood (ML) estimation. In the first step we performed confirmatory factor analysis (CFA) to test the distinctiveness of the study constructs.

In the second step we ran the structural equation model (SEM) which specifies the relationship between the focal latent variables. Further, bootstrapping (10,000 iterations) was used to test the indirect effects and produce 95% bias corrected confidence intervals. The goodness of fit of the SEM models was evaluated based on a range of fit indices including the χ^2 value, the Root Means Square Error of Approximation (RMSEA), the Standardised Root Means Square Residuals (SRMR), the Comparative Fit Index (CFI), and the Tucker Lewis Index (TLI). Levels of 0.90 or higher for TLI and CFI and levels of 0.06 or lower for RMSEA, combined with levels of 0.08 or lower for SRMR, indicate that models fit the data reasonably well (Byrne, 2011). Furthermore, Akaike Information Criterion (AIC; Akaike, 1974) was used to evaluate the alternative models, with the smaller value indicating the better fitting model.

Descriptive statistics

Table 1 presents the descriptive statistics and the intercorrelations between the focal variables of the present study.

Measurement Model

We tested a four-factor model including tranformational leadership, mission valence, emotional exhaustion and depersonalization, in which all items were specified to load on their respective factors. This model yielded a reasonable fit to the data, $\chi 2$ (203) = 456.18, $p < .001$, CFI = .91, TLI = .90, RMSEA = .08 (90% CI: .07; .09), SRMR=.06, AIC =12799.19. This model yielded a better fit to the data than any other parsimonious model, including a three-factor model that combined transformational leadership and mission valence, a three-factor model that combined burnout as well as a one factor model (see Table 2). Models were compared using the chi-square difference test (Bentler & Bonett, 1980).

Structural Model and Hypothesis Testing

In the second step, we tested the structural model (see Figure 1). The SEM model provided a reasonable fit to the data, (χ2 (298) = 553.56, p < .001, CFI = .91, TLI = .90, RMSEA = .07, SRMR = .06, AIC= 12779.77). The model explains 14% of the variance in emotional exhaustion R^2 = .14; p = .01, and 22% of the variance in depersonalization, R^2 = .22; p = .001. Consistent with Hypothesis 1, the results showed a significant positive relationship between transformational leadership and mission valence (β = .43, p < .001). Moreover, consistent with Hypotheses 2a-b, mission valence was negatively related with both emotional exhaustion (β = -.23, p = .016) and depersonalization (β = -.33, p = .001). Hypotheses 3a-b proposed that mission valence would mediate the relationship between transformational leadership and the two core dimensions of burnout. Bootstrapping analysis based on 10,000 iterations and accelerated confidence intervals (CI 95%) confirmed that via mission valence, transformational leadership had an indirect effect on emotional exhaustion, b= -.10 CI [-0.21, -0.02] and depersonalization, b= -.14 CI [-0.27, -0.05]. The 95% bias-corrected confidence interval did not contain zero for both burnout dimensions, i.e., emotional exhaustion and depersonlisation. Table 3 specifies the total, direct, and indirect effects obtained. Overall, the results indicate that Hypotheses 3a-b were confirmed, that is, mission valence mediated the effect of transformational leadership on burnout.

Discussion

Burnout is an epidemic among health care professionals and scholars are continuously searching for the best solutions to alleviate it (Boudrias et al., 2012; Holland et al., 2013). Burnout is particularly prevalent among health care workers because of their highly pressurised work environment and emotionally intensive work (Schmidt et al., 2017), which is exacerbated by the regular pressures of fiscal and social sustainability issues (e.g., Mohrman & Shani, 2014). Burnout is a costly outcome because it not only negatively impacts the care providers but also the wellbeing of those they care for (e.g., Cimiotti et al., 2012). The COVID-19

pandemic has shone a light on the topic of burnout among health care workers since the traumatic events encountered and the escalation of job demands deplete their resources and place them at an increased risk for burnout and depression (Caldes et al., 2020). Therefore, it is critical to understand, for health care scholars and health care managers, how to curb burnout among hospital staff.

The present study proposes a new lens on the burnout challenge in health care built around transformational leadership and mission valence. Our findings demonstrate that transformational leadership is negatively associated with burnout among hospital staff three years later, and that mission valence is the process through which transformational leaders exert their impact. Specifically, the findings suggest that by increasing the perceived attractiveness or salience of an organization's mission, transformational leaders can help alleviate burnout among employees who operate in a challenging and stressful environment. The use of the time-lagged study design strengthens the validity of our conclusions. The present research makes three key contributions to the existing literature.

First, responding to calls from scholars to investigate interventions to reduce burnout among health care workers (e.g., Holland et al., 2013), the findings of the present study indicate the relevance of transformational leadership. These results confirm health care researchers' assumption that transformational leadership provides a framework for effective leadership in the health care environment (e.g., Gabel, 2013). Further, in line with motivational process of the JD-R model (Demerouti et al., 2001; Schaufeli, 2015), we found that transformational leadership reduced depersonalization and emotional exhaustion. These findings are consistent with leadership studies which found that managers who engage in transformational leadership can reduce depersonalization (e.g., Hetland et al., 2007; Kanste et al., 2007). The present study extends these findings to the health care context and overcomes limitations in past research which had not studied the two core aspects of burnout simultaneously (e.g., Stordeur et al.,

2001). Our findings suggest a broader research agenda for those interested in how transformational leadership shapes not only motivational but also health related wellbeing outcomes. It is advisable for health care scholars to further bridge the literature on transformational leadership and burnout as well as other well-being outcomes together. The JD-R model is a robust and parsimonious framework, which allows for the same (Schaufeli, 2015; Schaufeli & Taris, 2014).

Second, building on the notion that leaders "set the table" for beneficial outcomes (Moynihan et al., 2011; p. 143), and that the effect of transformational leadership on burnout may be indirect rather than direct in nature (Stordeur et al., 2001), our study investigated a key process through which transformational leaders can alleviate health care workers' burnout, that is, by increasing their mission valence. It further addresses the gap according to which "research has not fully considered how these two [transformational leadership and mission valence] may work together" (Callier, 2016; p. 235) to influence employee outcomes. We found that mission valence fully mediated the relationship between transformational leadership and the burnout dimensions of emotional exhaustion and depersonalization. This finding suggests that hospital leaders "can make the social contribution of the mission seem more attractive and engaging to subordinates by utilizing a transformational leadership style" (p. 236, Callier, 2016). When they articulate a compelling and clear vision, act as a role model, encourage employees to think for themselves and coach them, transformational leaders help employees to see the intrinsic value in their hospital's mission and to understand the critical role they play in helping the organization achieve its goals. In doing so, they increase the attractiveness and importance of the organization's mission in the eyes of their followers, which, in turn, leads to lower feelings of being emotionally exhausted and cynical or uncaring in their attitudes. These findings are particularly critical for hospitals and its staff and patients. By having hospital staff work towards an appealing, purposeful and psychologically rewarding mission, organizations

and their leaders create a more humanistic work environment; this in turn contributes to the well-being and psychological functioning of staff - which is critical for the high-quality care of patients and overall hospital performance (Buchan 2004; Prins et al., 2010; Veld et al., 2010).

Third, an additional contribution of the present study concerns theoretical and methodological advancement in the field of leadership and well-being. Follower burnout develops over time and it might take longer for leader behavior to affect such well-being outcomes (Den Hartog & De Hoog, 2009; Halbesleben et al., 2014). The majority of studies on the relationship between transformational leadership and burnout have relied on cross-sectional research designs. In contrast, our study used a time-lagged research design, which enabled us to examine the impact of employee perceptions of leadership via mission valence on burnout at time 2, that is, three years later. In doing so, we tested and established the causal order of our focal variables and mitigated the possibility of inflated correlations between the predictor and outcome variables due to their measurement at the same point in time (Sanchez & Viswesvaran, 1996). Moreover, while no study has yet studied the impact of mission valence on burnout, related research suggests the possibility of a relationship in either direction – negative or positive. Any findings in support of either direction might also be due to the type of study design employed. While an attractive and meaningful mission might be related to low levels of burnout in a cross-sectional design, the same mission might be positively related to burnout levels in a lagged design where the mission might compel employees to go 'above and beyond the call of duty' (Dilulio, 1994; p. 281). This can lead to employees depleting their resources over time, which ultimately leads to emotional exhaustion and depersonalization. We do not find evidence for the latter explanation and our time-lagged study design strengthens the validity of this conclusion.

Practical Implications

Our findings clearly show that leaders embracing transformational leadership are successful in reducing burnout and that mission valence is critical in this process. This leadership style transforms followers' values and encourages them to go beyond self-interest for the betterment of others. This is particularly relevant to health care contexts because of its transcending purpose to serve patients and their families. Consequently, hospitals need to recognize the critical role of leaders in helping to prevent or at least alleviate the burnout of their employees. Hospitals should therefore increase their efforts to recruit well-trained clinical professionals and mission-oriented transformational leaders (Bechtle, 2000). Indeed, health care organizations and hospitals should focus on training and developing health care leaders to be more transformational and charismatic (Cummings et al., 2008; see Antonakis et al., 2011 for training charisma), so that they can maintain and improve the wellbeing of their employees (e.g., Kelloway & Barling, 2000). HR professionals in hospitals need to train their managers to understand their leadership style and to be able to recognize the differences between a transactional and transformational leader. Managers can be developed in their own transformational leadership by exposing them to difficult contexts requiring the development of an inspiring vision and the organization of activities that will nourish the collective intelligence of the group. Examples of successful programmes from within the National Health Service in the United Kingdom include the Royal College of Nursing Clinical Leadership Programme (CLP), which was successful in improving nurses' transformational leadership competencies in England and Switzerland (Large et al., 2005; Martin et al., 2012). Leadership competencies can also be cultivated through mentoring, developmental assignments, and job rotation (for an overview, see West et al., 2015). It is important that healthcare organizations allocate enough budget to building these leadership capabilities. For example, the NHS in England has dedicated tens of millions of pounds to the NHS Leadership Academy with the aim of developing leadership capabilities across the NHS (West et al., 2015). It is estimated

that between 20 and 29 per cent of an organization's training and development budget is dedicated to leadership development (Training Industry Report, 2007). The selection and development of transformational leaders is critical as these leaders internalize the organizational mission and "walk the talk" to highlight the relevance of the mission through their decisions and action (Pasha et al., 2017). In doing so, transformational leaders in health care settings make employees feel the importance of the mission and strengthen the extent to which employees perceive the salience of the organization's goals (e.g., Paarlberg & Lavigna, 2010). As revealed by our study, this process is associated with lower levels of staff burnout.

Limitations and Future Research

Although our study which used time-lagged data from hospital employees offers several important advantages, it also contains some limitations. First, the hospital context of the present study is somewhat unique as the health care tasks are quite specific and involve a high level of interaction between hospital staff and patients (Demerouti et al., 2001). Although similar findings are likely to be found in other organizations, the strength of the relationships between the focal variables might be particularly pronounced in the healthcare context. Second, the data was collected as part of a large-scale consultancy project for a Canadian hospital already a decade ago which may raise questions about the relevance and validity of the findings. Nevertheless, the research questions that this paper seeks to answer and empirically test are just as valid now and many of the issues confronting health care staff in the Canadian health care sector, such as burnout, are still pervasive today. The problems of professional burnout in the Canadian health care network have existed for several decades and the arrival of the pandemic has only exacerbated this situation (Canadian Health Care Association, 2015). Therefore, we do not believe that the period of data collection significantly confounds the results and see the paper's research question and results as critical and timely. Third, for future research, we encourage researchers to consider not only surveying employees' perceptions of

the extent to which their leaders are transformational but also to survey the leaders themselves. In doing so, future research would employ a stronger design with data from multiple sources and be more equipped to rule out common method bias due to same-source self-reported data. In the same vein, since the present employs a time-lagged study cognizant of the fact that transformational leadership takes time to influence burnout (De Hoogh & Den Hartog, 2014), future studies might collect data over a longer period of time to assess changes in burnout arising from transformational leadership. Forth, assessing leaders in addition to followers more generally would allow for the possibility of capturing emotional contagion effects. Health care leaders are also subject to the same types of challenges and demands as their follows and therefore even transformational leaders might also 'burn out' over time. Consistent with the suggestions of Breevaart et al. (2014), future researchers could investigate how the burnout of leaders might cross-over to their followers and vice versa. Finally, we recommend that scholars build on this research and employ multilevel designs. For example, transformational leadership behavior might vary within a given day and thus give rise to different day-level perceptions of mission valence and thus contribute to feelings of being burned out.

Conclusion

This present research examined the impact of transformational leadership on burnout of hospital staff via the mediating role of mission valence. Transformational leadership was negatively related to lagged levels of burnout. Moreover, mission valence accounted for these effects. In conclusion, this evidence suggests that transformational leaders play a pivotal role in followers' well-being in the workplace and that creating an appealing and meaningful mission in the eyes of their followers is the process by which they do so.

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Table 1: Descriptive statistics and intercorrelations of focal variables

Variable	M	SD	1	2	3	4	5	6	7	9
1. Occupation1	0.42	0.50								
2. Occupation2	0.07	0.26	-.24**							
3. Occupation3	0.16	0.36	-.37**	-.12						
4. Occupation4	0.08	0.27	-.25**	-.08	-.13					
5. Occupation5	0.21	0.41	-.43**	-.14	-.22**	-.15*				
6. TL t1	4.66	1.30	-.18*	.03	.09	-.02	.05			
7. Mission t1	1.63	0.60	-.20**	.14	.07	-.15*	.25**	-.05		
8. Exhaustion t2	3.36	1.50	.04	-.21**	-.09	.16*	.05	-.17*	-.16*	
9. Depersonalization t2	2.83	1.31	.04	-.21**	-.09	.21**	.06	-.18*	-.13	.78**

Note. *p < 0.05; ** p < 0.01; ***p<.001; Occupation 1 = Nursing and cardiorespiratory personnel; Occupation 2 = Paratechnical, auxiliary service and trade personnel; Occupation 3 = Office personnel; Occupation 4 = Health and social services technicians; Occupation 5 = Health and social services professionals; TL t1 =Transformational Leadership at time 1; Mission t1 = Mission Valence at time 1; Exhaustion t2 = Emotional Exhaustion at time 2; Depersonalization t2 = Depersonalization at time 2

Table 2: Confirmatory Factor Analysis of Measurement Models and Fit Indices

Models	χ^2	Df	Δ χ2	CFI	TLI	RMSEA	SRMR	AIC
1. Hypothesized 4-Factor Model	456.18	203	-	.91	.90	.08	.06	12799.19
2. Three-Factor Model: Combining Mission Valence and Transformational Leadership	767.74	206	311.56***	.81	.78	.12	.10	13104.75
3. Three-Factor Model: Combining Emotional Exhaustion and Depersonalization	515.70	206	59.52***	.89	.88	.09	.06	12852.72
4. One-Factor Model	1876.14	211	1419.96***	.43	.37	.21	.24	14203.154

N=185; χ^2 = Chi-square, df = degrees of freedom; Δ χ2= difference in chi-square; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = Root Mean-Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

***$p < .001$

Table 3: Bootstrap Results for Mediations

Effects	β	SE	BootLLCI	BootULCI
Transformational leadership on exhaustion				
Total	-.17*	.09		
Direct	-.07	.09		
Indirect	-.10*	.05	-.21	-.02
Transformational leadership on depersonalization				
Total	-.18*	.09		
Direct	-.04	.09		
Indirect	-.14*	.06	-.27	-.05

Note. *$p \leq .05$

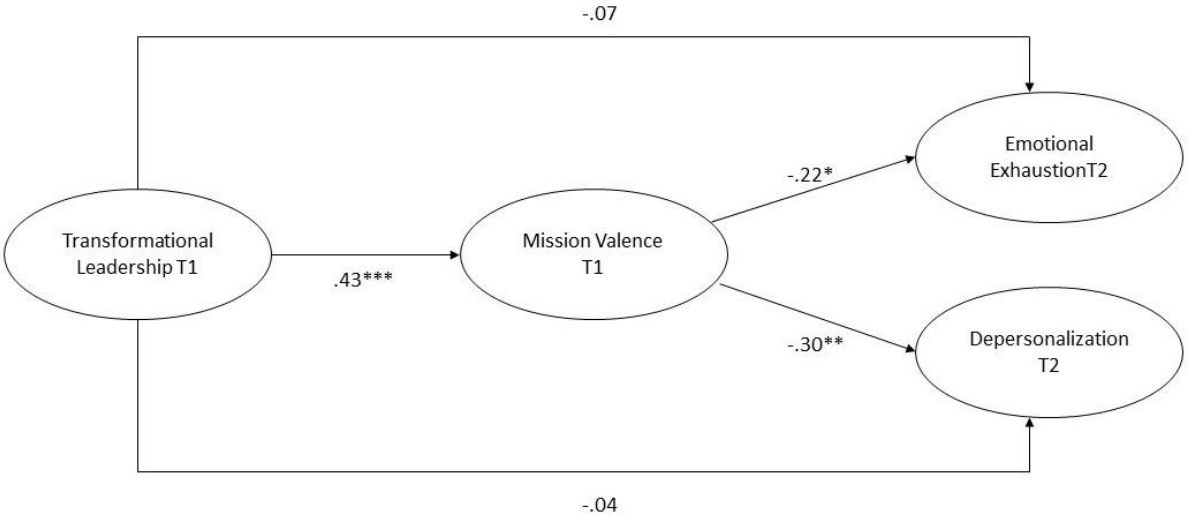

Figure 1. Results depicting mission valence as a mediator of the effects of transformational leadership on burnout, that is, emotional exhaustion, and depersonalization. N = 185. Standardized regression coefficients are shown. *p < .05; ** p < .01; *** p < .001