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The Relationship of Workplace Support, Job Control, and Burnout in Nurses

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THE RELATIONSHIP OF WORKPLACE SUPPORT, JOB CONTROL, AND BURNOUT IN NURSES

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ABSTRACT

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Nurses are the most likely group of healthcare workers to develop burnout. Previous research identified supervisory support, job control, and decision-making ability in the workplace as protective factors against burnout. There was a gap in the literature regarding the relationship between burnout in nurses and their experience of support, control, and decision-making during the COVID-19 pandemic. Reducing and preventing burnout in nurses is important due to the nursing shortage and concerns of attrition rates. This quantitative study examined the relationship of emotional support, instrumental support, job control, and decision-making opportunities in the workplace to burnout in hospital-based nurses. Measures used included the Maslach Burnout-Inventory: Human Services Survey (Medical Personnel; MBI:HSS (MP)), the Dwyer and Ganster work control scale, and support questionnaires. On average, respondents had high levels of emotional exhaustion and moderate levels of depersonalization and sense of personal accomplishment. Significant positive relationships were found between emotional support and personal accomplishment, instrumental support and personal accomplishment, and job control and decision-making and personal accomplishment. Significant negative relationships were found between emotional support and emotional exhaustion and instrumental support and emotional exhaustion. Hospital administrators and nursing supervisors would benefit from better understanding the relationship of support, control, and burnout for their staff nurses. This

Keywords: burnout, nurses, support, Maslach Burnout Inventory, quantitative

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Introduction

This dissertation examined the relationship of support, job control, and decision-making abilities in the workplace to the development of burnout in hospital-based nurses. The following sections provide a brief review of the literature on burnout, the development of the Maslach Burnout Inventory, and key findings from previous research. The literature review fully explores burnout in nurses, consequences of burnout in nurses, and areas research identified to prevent burnout in nurses. Following the literature review, a study is described that examined the relationship of various work-environment factors with burnout in nurses who worked during the COVID-19 pandemic.

Burnout has been studied since the 1970s (Freudenberger, 1974). The Maslach Burnout Inventory (MBI) was created in 1981, which defined the dimensions of burnout and provided a systematic method of measurement (Maslach & Jackson, 1981). Since then, burnout has been regularly studied among various types of workers, including teachers (Mota et al., 2021), healthcare workers (Hall et al., 2016), first responders (Benincasa et al., 2022), and office workers (Theorell, 2012). Originally, burnout was restricted only to employees working in human services (Maslach, 1982). However, that idea has been challenged and now any worker, regardless of job type, is considered a worker who may develop burnout under specific conditions (Demerouti et al., 2001).

For the purposes of this study, the Maslach and Jackson definition of burnout was utilized, and the MBI survey was used for data collection. Maslach and Jackson described burnout with three characteristics: emotional exhaustion, depersonalization, and reduced personal accomplishment (1981). Burnout is thought to develop in workers when their workload is increased beyond their individual energies and resources (Freudenberger, 1974; Maslach &

Jackson, 1981; Niconchuk & Hyman, 2020). Burnout is a problem for workers because it leads to immense stress for the individual and the workforce at large. Studies have shown the individual ramifications of burnout, including increased risk for substance abuse (Patel & Keswani, 2019), depression (Alkhamees et al., 2021; Peterson et al., 2008), anxiety (Benincasa et al., 2022; Peterson et al., 2008), sleep disturbances (Peterson et al., 2008), and relationship strain (Patel & Keswani, 2019). When individual workers are burnt out, they are more likely to make medical errors (Vahedian-Azimi et al., 2019), take sick time (Whittington et al., 2021), or leave their position entirely (Shah et al., 2021). This negatively impacts a company, as sick time can lead to decreased workforce productivity (Whittington et al., 2021); a diminished workforce can lead to staffing shortages (Spurlock, 2020) and mistakes (Van Bogaert et al., 2013).

Many studies also examined individual demographics that increase susceptibility to burnout (Benincasa et al., 2022; Besse et al., 2021; Christianson et al., 2023; Denning et al., 2021; Engelbrecht et al., 2009; Ezenwaji et al., 2019; Mota et al., 2021; Spence Laschinger et al., 2009; Vahedian-Azimi et al., 2019; Whittington et al., 2021). Demographic variables such as gender, age, and experience are often linked with burnout. Depending on the workforce studied, the demographics associated with higher rates of burnout change. For example, Besse and colleagues (2021) found that being a younger age (< 30 for the study), female, and having low seniority within the institution were factors which can lead to increased rates of burnout for hospital personnel. Mota and colleagues provided their results via the characteristics of burnout and indicated that female teachers were more likely to experience high rates of emotional exhaustion whereas male teachers were more likely to experience high rates of depersonalization (2021). Furthermore, findings from Mota et al. (2021) indicated that teachers, regardless of gender, experienced higher rates of burnout when they perceived their training to be inadequate.

While not specifically a demographic variable, a worker's ability to manage their stress is another variable researched. A 2022 study specifically measured individual psychological vulnerability among first responders, indicating that to prevent burnout, anxiety, and depression, psychoeducation about stress relief may be useful (Benincasa et al., 2022).

While individual factors certainly play a part in burnout, these studies often did not address the larger systemic issues that may have occurred in the workforce. Thus, research that examines system-wide factors in the prevention and treatment of burnout is salient. Eriksson and colleagues (2009) specifically looked at how organizational support can help mitigate the experience of emotional exhaustion and depersonalization among humanitarian aid workers. Aid workers who had strong bonds with coworkers and with the overall organization were less likely to feel emotionally exhausted and more likely to feel connected to their work and the people they were helping than workers who did not have strong bonds. A study conducted in 2009 by ten Brummelhuis looked at how emotional support in the workplace and at home was best for reducing burnout. The study defined emotional support in the workplace as good relationships with colleagues, which provided the workers with empathy and understanding. Emotional support was more beneficial for reducing burnout than instrumental support, such as a flexible work arrangement or help with work tasks. Arnold and Dupré (2012) found that employees who perceived support from their organization had better overall health. While the Arnold and Dupré (2012) study did not measure burnout specifically, it was later established that burnout negatively affects people's overall health (Patel & Keswani, 2019).

The previous section described prior study's findings of burnout research. Individual and systemic-level variables were identified that were correlated with burnout among workers. Despite the extent of the burnout literature, there were still gaps in the existing literature.

Specifically, there was not a study looking at how job control and workplace support correlated with burnout among nurses within the context of the COVID-19 pandemic. This study sought to examine that connection. The next section defines the three different characteristics of burnout, as described by Maslach and Jackson (1981).

Burnout: Key Terms

Burnout is defined as "a persistent, negative, work-related state of mind found in 'normal' individuals that is characterised [*sic*] by exhaustion and distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional attitudes and behaviors within the work environment," (Schaufeli & Enzmann, 1998, p. 36). Burnout is considered unique from depression, anxiety, or stress because of its specific characteristics: emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment (Maslach & Jackson, 1981; Schaufeli et al., 2018). Burnout in nurses is very common and expected to continue rising (Denning et al., 2021; Shah et al., 2021; Woo et al., 2020). The high rates of burnout need to be addressed because the negative effects can lead to both physical and psychiatric distress for nurses as well as worsened patient outcomes (Vahedian-Azimi et al., 2019; Van Bogaert et al., 2013).

Emotional Exhaustion

Emotional exhaustion is a depletion of emotional resources (Day et al., 2017). Nurses who experienced emotional exhaustion struggle to interact with patients on a psychological or emotional level. The nurses' ability to connect with their patients on an emotional level is a hallmark of the profession (Engelbrecht et al., 2009). Nurses developed emotional exhaustion from feeling overworked and having too many demands placed on them. Maintaining a manageable workload, or even a sense of a manageable workload, was one way to lessen the

experience of emotional exhaustion (Whittington et al., 2021). This can be done by equitably distributing the workload among the nurses on the floor. Another way emotional exhaustion was combated was for nurses to take their breaks and for supervisors to support nurses taking breaks (Hurtado et al., 2015; Whittington et al., 2021). Breaks gave nurses time during their shift to decompress, eat, and socialize with other healthcare workers, all of which have been shown to be protective factors for psychological distress (Hurtado et al., 2015). Furthermore, knowing their supervisors support their breaks reduced a sense of guilt a nurse may experience when stepping away from the floor (Hurtado et al., 2015).

Depersonalization

In the context of nursing, depersonalization often led to nurses experiencing negative, cynical, and impersonal attitudes toward patients (Engelbrecht et al., 2009). Depersonalization occurred when nurses did not feel they had enough control in their work or were not receiving enough support from management or colleagues. One predictive factor of depersonalization was the experience of moral distress and the eventual development of moral injury (Riedel, et al., 2022). Moral distress is considered a "a result of the violation of professional values and practices," (Riedel, et al., 2022, p. 3). At times, nurses are not able to do their work in line with their professional values due to lack of control or decision-making ability. When moral distress continues, moral injury can develop. Moral injury can lead to nurses losing trust in themselves, supervisors, and the hospital system (Riedel, et al., 2022).

In early development, depersonalization is a coping skill that one uses to manage excessive job demands. This allows already emotionally drained nurses to separate themselves from their patients. Depersonalization eventually leads to lower job performance, which can increase medical errors, jeopardizing patient safety and outcomes (Engelbrecht et al., 2009;

Vahedian-Azimi et al., 2019). One way to prevent depersonalization in nurses is to increase their decision-making abilities and sense of control while working (Mudallal et al., 2017; Whittington et al., 2021). When nurses' decisions are trusted, it also increases their sense of meaningfulness in their work, as the full extent of their knowledge and education is utilized. Feeling empowered has been shown to decrease experiences of depersonalization (Mudallal et al., 2017).

Reduced Personal Accomplishment

Nurses can develop a tendency to judge and evaluate their work with patients in a negative manner (Engelbrecht et al., 2009). They no longer experience their work as an achievement and work becomes a burden. When nurses experience a reduced sense of personal accomplishment, they are more likely to report desire or intention to leave their position which is a concern for healthcare due to a national shortage of nurses (Spurlock, 2020). It is also a concern for nurses who have spent time and money receiving training.

Burnout in Nurses

Woo et al. (2020) conducted a meta-analysis, and their findings suggested a 10.27% rate of burnout among North American nurses. More specifically, Shah et al. (2021) used data from the 2018 U.S. Department of Health and Human Services' Health Resources and Service Administration National Sample Survey of Registered Nurses and found that of the 9.5% of nurses who had left their job in the previous year, 31.5% of those nurses cited burnout as a reason. For nurses who had considered leaving their job, 43.4% cited burnout as a reason. Nurses are the most likely group of healthcare workers to struggle with burnout. Variables connected to the development of burnout symptoms include, but are not limited to, chronic physical and psychological stress, irregular work hours, rotating shifts, and chronic understaffing (Woo et al.,

2020). High rates of burnout were correlated with high rates of nurse turnover (Spence Laschinger et al., 2009).

Research showed that healthcare workers experienced lower levels of burnout when they were provided with emotional and physical support from management (Eriksson et al., 2009). Burnout negatively impacted the collective hospital workforce, from management to nurses, but was especially damaging to nurses when the messages they received from the hospital organization were that the burnout was a result of their personal weakness (Houtrow, 2020). Strained relationships between nurses and supervisors/administrative personnel were correlated with increased rates of burnout (Arnold & Dupré, 2012; Cotel et al., 2021; Mudallal et al., 2017).

Nurses & COVID-19

The global toll the COVID-19 pandemic took on healthcare workers, and nurses more specifically, began to be studied shortly after the pandemic started. Denning and colleagues (2021) examined the increased pressure applied to healthcare workers and the risk patient-facing workers (i.e., doctors and nurses) had of developing burnout while working during the pandemic.

Since the pandemic, rates of burnout differed between surveys. Denning and colleagues (2021) found rates of burnout to be 67% of healthcare workers surveyed, with one risk factor being working as a nurse. However, Cotel and colleagues (2021) found 14.5% of healthcare workers surveyed were experiencing a clinical level of emotional exhaustion. Newspapers wrote of the worsening staffing problems as the pandemic continued to take its toll on healthcare workers, and many nurses began to publicly denounce hospital administrators (Castillo, 2022; Otterman & Goldstein, 2022; Sasic, 2022).

Christianson and colleagues studied the extent of burnout among nurses who worked directly with COVID-19 patients and those nurses' intentions to leave the field (2023). Findings

discovered that work-related burnout and compassion fatigue were significant contributors to the intention to leave the field. Nurses with higher rates of burnout reported increased likelihood to leave the field. Christianson and colleagues' findings found that nurses who worked with COVID-19 patients were not any more likely to leave the field than nurses who did not work with COVID-19 positive patients (Christianson et al., 2023). The researchers hypothesized these results may have been impacted by any financial compensation nurses working with COVID-19 positive patients received.

Raso and colleagues (2021) studied nurses' intent to leave their position and profession during the COVID-19 pandemic. Their study found that 11% of surveyed nurses intended to leave their current position and 20% were undecided. The study also found that 90% of nurses surveyed reported they intended to remain in the nursing profession in some capacity, even if they were considering leaving their current position.

Travel Nursing

Travel nurses are registered nurses who work short-term contracts at hospitals, clinics, or other health care facilities (Yang & Mason, 2022). These nurses are typically contracted by a staffing agency. Many nurses switched to travel nursing because the wages were often much higher than their previous nursing wages (Westhead, 2023; Weston, 2022; Yang & Mason, 2022).

Yang and Mason (2022) reported travel nursing increased by 35% from 2019 to 2020. While travel nursing had been rising before the pandemic, the pandemic exacerbated staffing issues, which contributed to nurses leaving their full-time positions for travel nursing. Travel nurses can alleviate a staff shortage in a hospital temporarily, but it can also create an environment of regularly needing to hire new short-term nurses (Westhead, 2023). Reliance on

travel nursing to keep hospitals fully staffed can negatively impact full-time staff's morale (Yang & Mason, 2022). The pay discrepancy between travel nurses and staff nurses is one identified negative factor (Westhead, 2023; Yang & Mason, 2022). Also, travel nurses typically did not receive as much orientation training as staff nurses which impacted clinical care, communication, and added more stress to the entire nursing unit (Westhead, 2023).

Consequences of Burnout

Burnout becomes a vicious cycle for nurses. Increased job demands, often brought on by staffing issues, was one variable connected to the development of burnout (Cotel et al., 2021). Heightened emotional exhaustion, possibly brought on by the exacerbated job demands, also put nurses at risk for developing burnout (Whittington et al., 2021). A hospital that does not offer emotional or instrumental support to their nursing staff was also linked with higher experiences of burnout (Arnold & Dupré, 2012; Eriksson et al., 2009), which could increase risk for the development of depression or anxiety. Anxiety and depression are linked with concentration issues (American Psychiatric Association, 2013). Concentration issues may make it harder for a nurse to properly do their difficult, precise, and technical job, which could lead to medical errors (Shanafelt et al., 2010). Medical errors were associated with burnout and the cycle went on.

Compassion Fatigue

Compassion fatigue is distinct from burnout as it is linked with repeated exposures to suffering of patients and from knowing the traumatic experiences of patients whereas burnout is comprised of multiple aspects (i.e., emotional exhaustion, depersonalization, and decreased sense of personal accomplishment; Cavanagh et al., 2020). Considering compassion fatigue is important within the context of burnout because burnout can lead to compassion fatigue. Nurses had an elevated risk for compassion fatigue if they were unable to continuously renew

themselves from the draining work or if they worked in settings where they care for patients who are likely not to return to a previous level of wellness (Todaro-Franceschi, 2013). However, all nurses are inherently at risk because they will all eventually witness suffering due to the nature of their work.

Cavanagh and colleagues (2020) conducted a meta-analysis which found burnout measures to be highly correlated with compassion fatigue. Compassion fatigue was identified as one factor correlated with absenteeism, poorer patient outcomes, and intent to leave the field. Compassion fatigue was directly related to the emotional exhaustion piece of burnout and if not addressed during the onset, could lead to the nurse experiencing all the negative effects of burnout (Bouchard, 2016; Todaro-Franceschi, 2013). The previous section outlined the prevalence of burnout in nurses and the negative impact burnout has on them. The next section outlined research that was shown to prevent burnout, particularly workplace support, job control, and decision-making abilities.

Preventative Factors

Organizational support is one way to promote nurse wellness and decrease symptoms of burnout (Aiken et al., 2008; Arnold & Dupré, 2012; Ericksson et al., 2009; Hurtado et al., 2015; ten Brummelhuis, 2009). Support can come in the form of empowering nurses' decision making (Mudallal et al., 2017), facilitation of peer collaboration (Vahedian-Azimi et al., 2019), or providing adequate resources (Cotel et al., 2021; Van Bogaert et al., 2013).

Tertiary prevention, treatment of the actualized experience to stop its further progression (Gatchel & Kishino, 2012; Moritsugu et al. 2019), was the typical treatment for burnout. This did not address the systematic issues within the hospitals that lead to burnout, nor did it prevent those nurses from experiencing burnout in the future. Primary and secondary prevention helped

to detect early signs of burnout and manage symptoms of burnout before they became severe (Gatchel & Kishino, 2012; Moritsugu et al. 2019). Creating a work environment that cared for employees' mental health and took their criticisms of the culture seriously was one way to address the high rates of burnout in nurses (Kirsh & Gewurtz, 2012).

Workplace Support

When addressing burnout in nurses in a hospital or on a specific unit, it was important to conduct a root cause analysis, rather than solely treating burnout symptoms. Organizational-level interventions were theorized to be effective forms of burnout prevention (Arnold & Dupré, 2012; Eriksson et al., 2009; Mudallal et al., 2017; Patel & Keswani, 2019; Shanafelt & Noseworthy, 2017; ten Brummelhuis, 2009). Increasing the amount of support employees feel from management and the amount of job control experienced while working are two theorized organizational interventions. In general, these interventions focused on reducing the number of or lessening the impact of stressors in an environment (Theorell, 2012).

Theorell (2012) suggests a guiding principle in the implementation of organizational-level interventions is to have all levels of employees involved in decision making and planning to ensure all have the opportunity to give input. In a hospital setting, nurses, nurse managers, and upper management of the hospital could be invited to discuss opportunities for improvement.

The Mayo Clinic regularly surveys hospital employees to ensure that burnout is being addressed (Shanafelt & Noseworthy, 2017). They found that effective leadership was highly correlated with lower rates of burnout. It was directly linked to professional satisfaction of individual physicians. Effective leadership has been defined as clear and direct, but flexible and supportive (Ruddy & McDaniel, 2024). The social support literature identified many types of support, including emotional, tangible, instrumental, informational, appraisal, esteem, and

network (Heaney & Israel, 2008; Xu & Burleson, 2001). Instrumental, informational, and tangible support are often used to explain the same types of support but use different names. Appraisal and esteem support are also often used to explain the same types of support but use different names. For the purposes of this study, emotional support and instrumental support were used, as those were the two types of support most applicable to the workplace.

Emotional Support

Forms of emotional support in the workplace were described as "listening to one's work concerns, allowing one to vent their emotions, and providing words of encouragement in difficult times," (Mathieu et al., 2019, p. 388). These aspects of support were important because they provide socioemotional resources to others, including sympathy, understanding, and acceptance. Experiencing emotional support was linked to desirable psychological, emotional, relational, and health outcomes (Xu & Burleson, 2001). Furthermore, when workers were high in socioemotional resources, they often experienced lower levels of work-related stress (Mathieu et al., 2019).

Emotional support was utilized to impact the experience of the three characteristics of burnout (Denning et al., 2021; Mathieu et al., 2019). While having a supervisor take the time to empathically listen to nurses' concerns did not directly reduce the amount of work demands that lead to emotional exhaustion, it did communicate the number of demands a nurse experienced to the attention of the supervisor. Emotional support directly affected the depersonalization and sense of personal accomplishment nurses experienced. The negative, cynical attitudes nurses may feel toward patients from depersonalization can be reduced via expressing related thoughts and having a supervisor reframe and empathize with the thoughts. Emotional support provided

by supervisors was also helpful when nurses felt a reduced sense of personal accomplishment, as they identified examples of good work when nurses were harshly critical of their own work.

Instrumental Support

Instrumental support referred to support that involved the provision of material assistance, such as goods and services, and support that involved the provision of facts and advice (Mathieu et al., 2019; Xu & Burleson, 2001). When a supervisor was able to provide instrumental support to the nurses who work underneath them, they demonstrated to the nurses their own ability to do the work. Nurses were more likely to seek out instrumental support from supervisors whom they trusted to know the answers to their questions (Mathieu et al., 2019). A supervisor stepping in and providing an additional service to the nurse, i.e., administering medication to a patient while the nurse was occupied with someone else, or refreshing the skills of the nursing staff so everyone was working effectively and efficiently mitigated emotional exhaustion and depersonalization. A common example of instrumental support was providing knowledge related to work (Mathieu et al., 2019). When a supervisor taught a nurse something new that they then implemented in their work, the nurse's sense of personal accomplishment was likely to increase. In addition, consistent feedback and additional assistance may be ways a supervisor can provide instrumental support to help with personal accomplishment.

Job Control and Decision-Making

Along with support provided to nurses, their sense of control over their work, their ability to make prompt decisions, and their opportunity to make policy suggestions was correlated with lower levels of burnout (Mudallal et al., 2017; Whittington et al., 2021). While nurses may not have control over the number of patients on their caseload for a shift, a perception of control over their workload was still linked with lower levels of burnout (Whittington et al., 2021). Job

demands were the responsibilities nurses needed to attend to during their shifts, such as documentation and patient care (Gerich & Weber, 2020). Low job control, such as needing to write notes at a certain point in their shift, was linked with higher stress levels than nurses who have high job control.

The Job Demands-Resources model (JD-R model; Demerouti et al., 2001) expanded on the literature to posit that "when job demands are high and when job resources are limited," (Demerouti et al., 2001, p. 499) burnout develops. More specifically, high job demands were likely to contribute to emotional exhaustion and low job resources which were likely to lead to depersonalization. This combination led to a decreased sense of personal accomplishment in job settings.

More specifically, the research showed physical workloads (Janssen et al., 2001), time pressure, unfavorable shift-work schedules (Kandolin, 1993), low levels of performance feedback (Åström et al., 1990), poor job control (Landsbergis, 1988), less participation in decision making (Jackson et al., 1987), and lack of support from supervisors (Leiter, 1989) were related to symptoms of emotional exhaustion and depersonalization. The JD-R model showed that these variables interact uniquely with the individual (Roeters, 2014). Employee health benefited from having a wide range of job resources and reduced, or tolerable, job demands. The JD-R model was empirically validated since the original study was done and shown to be an effective model to use (Hakanen et al., 2008; Shaufeli et al., 2009; Brauchli et al., 2013; Bakker & Demerouti, 2017).

Maslach and Goldberg (1998) researched the importance of an employee's decision-making ability in reducing burnout. They found that when an employee was able to make decisions about their work, their sense of job control increased. Maslach and Goldberg (1998)

also found that when employees were involved in decision making procedures that applied to the organization at large, they experienced lower levels of work-related stress and were less likely to develop burnout. For example, nurses who were able to prioritize which patient to attend to first had greater decision-making ability and job control. Studies have shown that when nurses' input was utilized when policies were implemented or changed, they felt empowered by this decision-making ability, which was related to lower levels of burnout (Mudallal et al., 2017; Whittington et al., 2021). It is important for hospitals to look for ways to ensure their nursing staff feel empowered in their ability to make decisions and have their voice heard and respected.

Dwyer and Ganster (1991) created a job control scale which demonstrated support for the idea that job stress and job control are linked to employee outcomes, such as job satisfaction, utilization of sick days, and tardiness. The study demonstrated that high job control was correlated with negative employee outcomes, regardless of high workload and high psychological demands.

Summary

As of 2020, one in ten nurses worldwide developed symptoms of burnout. The World Health Organization (WHO) considered burnout an occupational phenomenon (Woo et al., 2020). Hospital systems neglected the implications of burnout on its workforce which placed the responsibility of care for one's burnout onto the individual nurse. Hospital systems did not address these issues within the workplace despite research showing the effectiveness of organizational-level interventions (Theorell, 2012). Support and control were two crucial factors in preventing and reducing burnout among nurses. Increased organizational support, which included instrumental and emotional support, was a protective factor against symptoms of burnout (Arnold & Dupré, 2012; Cotel et al., 2021; Eriksson et al., 2009; ten Brummelhuis,

2009). Increased sense of job control and more decision-making ability were shown to reduce aspects of burnout (Mudallal et al., 2017). Understanding burnout and working to reduce burnout could impact the rates and negative consequences of burnout at a local hospital level, and ultimately, at a larger societal level.

Study Aims

Further exploring the experiences and symptoms of burnout among nurses working in a hospital setting would provide better understanding of burnout syndrome within the context of the COVID-19 pandemic. Specifically, I examined how hospital systems within which nurses work related to the experiences of burnout. This study provided information for the experience of burnout among nurses two and a half years into the COVID-19 pandemic. It also provided information on factors that may be considered in developing preventative efforts for burnout. The specific aims of this study were to identify current experiences of burnout among nurses and to explore whether job control and support are related to rates of burnout.

Research Questions

1. What are the experiences of burnout two-and-a-half-years into the COVID-19 pandemic among full-time nurses working in a hospital setting?
2. Is a nurse's experience of emotional support from supervisors provided by supervisors related to burnout?
3. Is a nurse's experience of instrumental support from supervisors provided by supervisors related to burnout?
4. Is a nurse's perception of job control and decision-making ability related to burnout?

Method

Participants

This study focused on full-time nurses working in a hospital and living in the United States. Participation in the study was voluntary and confidential. Nurses first completed the informed consent form and then a brief demographic questionnaire. Following the completion of these two forms, nurses completed the research survey, which included the Maslach Burnout Inventory: Human Services Survey (Medical Personnel), the Dwyer and Ganster Job Control scale (1991), and a series of questions created for this study covering the areas of emotional and instrumental support in the workplace.

Licensed practical nurses (LPNs) and nurse practitioners (NPs) were excluded from this study as their job demands differ from registered nurses (RNs). Surgical nurses were also excluded because of the changes that surgical nurses experienced during COVID-19. The nurses in this study needed to be working a full-time schedule doing direct patient care in a hospital. Nurses needed to be at least 18 years of age. Nurses needed to be able to read English.

A total of 105 nurses completed the survey. All respondents were nurses who met the study's inclusion criteria by their self-report. Data collection was completed from March 19, 2023, to April 17, 2023, about three years after the pandemic started.

Participants had been licensed for an average of 15.3 years (SD = 11.6 years). The median years licensed was 13 years. The range of years licensed from 2 years to 40 years. Nurses who were reassigned to another department during the COVID-19 pandemic comprised 27.6% of respondents, with 72.4% of respondents who were not reassigned. The racial and ethnic demographics of survey respondents were as follows: 88.6% White/Caucasian, 5.7% Asian/Asian American/Pacific Islander, 2.9% Latinx/Hispanic, and 2.9% Native/Native Alaskan.

Most respondents self-identified as female (94.3%) with the rest self-identifying as male (5.7%). The largest group of respondents worked on medical/postsurgical (Med/Surg) units (47.6%). The remaining survey respondents worked on post-anesthesia care units (PACU; 28.6%), emergency departments (8.6%), pediatric units (8.6%), labor and delivery units (3.8%), and as diabetic nurse educators (2.9%).

Procedure

Nurses were recruited through social media using convenience and snowball sampling. The minimum number of participants needed for this study was 100 participants. Social media was used so nurses did not feel pressure from their management to complete the survey, which was a potential issue with recruiting hospital administrators to distribute the survey to the nursing staff. The survey link was posted on Facebook for nurses to access. Nurses were encouraged to share the survey link with other nurses. Snowball recruiting was used to further distribute the survey beyond the scope of my social media accounts.

This research study utilized a quantitative design and surveys to collect relevant data. The surveys were all filled out virtually, through a Google form link. After Institutional Review Board (IRB) approval was granted by the IRB of Antioch University New England, data collection happened virtually through Google Forms for a one-month period; the time needed to gain at least 100 participants.

After nurses accessed the survey link, they were first asked to complete the informed consent form in order to understand the purpose of the research, their rights as a participant, and to give their consent to participate in the research study. Next, nurses completed a brief demographic questionnaire. The survey link then prompted the nurses to the next part, where

they answered the survey statements, including the MBI:HSS (MP), Dwyer and Ganster's Job Control Scale, and the statements about instrumental support and emotional support.

Measures

All constructs were measured using established scales or based on previous literature. Brief demographics were collected, followed by the Maslach Burnout Inventory: Human Services Survey (Medical Personnel), Dwyer and Ganster's job control scale, instrumental support statements, and emotional support statements. A copy of the survey is located in Appendix C.

Demographic Information

Nurses answered five demographic questions. These questions were *number of years worked as a nurse; race/ethnicity; gender identity; department working in;* and *whether they were moved to a different unit/specialty during the pandemic?*

Maslach Burnout Inventory: Human Services Survey (Medical Personnel; MBI:HSS (MP))

Level of burnout among the nurses was measured using the Maslach Burnout Inventory: Human Services Survey (Medical Personnel; MBI:HSS (MP)). The MBI was originally published in 1981 and is currently in its fourth edition (Maslach & Jackson, 1981). The MBI:HSS (MP) was specifically designed for health service workers who work directly with clients. The measure has 22 statements. Statements were answered on a seven-point Likert scale, ranging from *Never* to *Every Day*. The MBI:HSS (MP) was been standardized among workers in social services, medicine, and mental health. Coefficient alpha was 0.90 for emotional exhaustion, 0.79 for depersonalization, and 0.71 for personal accomplishment (Kavan & Powell, 2021). Validity for the MBI:HSS (MP) was demonstrated through several studies (Bianchi et al., 2015; Eckleberry-Hunt et al., 2018; Maslach & Leiter, 2016). Emotional exhaustion was most

strongly associated with intentions to leave one's profession. Each of the MBI subscales, emotional exhaustion, depersonalization, and personal accomplishment, were related to relationships to co-workers, supervisors, patients, and families; physical well-being; and overall job satisfaction.

Job Control and Decision-Making

Job control and decision-making ability were assessed using Dwyer and Ganster 1991 work control scale. This measure has 22 statements. Statements were answered on a five-item Likert scale, ranging from *Very Little* to *Very Much*. The work control scale covered a range of work areas including control over tasks performed, order tasks need to be completed, breaks, procedures, and others. It was standardized among a sample of almost 200 white-collar workers, but was used with other professions, including nurses since its development (Li et al., 2020). The initial study yielded an internal consistency reliability of 0.87 (Dwyer & Ganster, 1991). The experience of work control was positively correlated with work satisfaction and negatively correlated with absenteeism.

Instrumental Support

Instrumental support was assessed using objective statements developed from the literature (Mathieu et al., 2019; Xu & Burleson, 2001). The statements were developed for the purposes of this study. Items included four questions related to nurses' perception of instrumental support within their workplace. Instrumental support is support that involves the provision of material assistance, such as goods and services, and support that involves the provision of facts and advice (Mathieu et al., 2019). The statements created for the survey were *My supervisor will cover my patients if I need them to; My supervisor directly helps me with patients when I need it; My supervisor supports me in taking my break during my shift; My*

supervisor offers to teach me new skills or help me brush up on old skills. Participants answered these statements using a four-point Likert scale (1 = *Never,* 2 = *Rarely*, 3 = *Often*, 4 = *All the time*).

Emotional Support

Emotional support was assessed using objective statements developed from the literature (Denning et al., 2021; Mathieu et al., 2019; Xu & Burleson, 2001). The statements were developed for the purposes of this study. The items included four questions related to nurses' perception of emotional support within their workplace. Emotional support is support which provides socioemotional resources to others, including sympathy, understanding, and acceptance, among others (Denning et al., 2021; Mathieu et al., 2019; Xu & Burleson, 2001). The statements created for the survey were *My supervisor expresses understanding of my stress; My supervisor expresses feeling similar stress; My supervisor comforts me when I am overwhelmed; My supervisor offers attentive comments when I speak; I can talk to my supervisor about stress and frustration I experience at work.* Participants answered these statements using a four-point Likert scale (1 = *Never,* 2 = *Rarely*, 3 = *Often*, 4 = *All the time*).

Data Analysis

Data analysis commenced following the end of the survey collection period. The data were uploaded to SPSS for analysis. Descriptive statistics were used to summarize demographic data, and included frequencies, means, and standard deviations. Descriptive statistics were used to summarize burnout as measured by the MBI:HSS (MP). Descriptive statistics were used to summarize the data for the three hypothesized related variables as measured by Dwyer and Ganster's Job Control and the statements for instrumental support and emotional support. The means and frequencies from the demographic data, MBI:HSS (MP), and the three hypothesized

related variables (job control and decision-making, instrumental support, and emotional support) were tabulated. Correlations were then calculated. Correlational analysis was performed to find the relationships among the demographic data, MBI:HSS (MP) scores, Dwyer and Ganster's job control scores, instrumental support scores, and emotional support scores. A one-way between subjects ANOVA was performed to see if relationships existed between the department nurses worked in and the MBI:HSS (MP). A one-way between subjects ANOVA was performed to see if relationships existed between the department nurses worked in and job control and decision-making, emotional support, and instrumental support.

Results

Question 1: What are the experiences of burnout two-and-a-half-years into the COVID-19 pandemic among full-time nurses working in a hospital setting?

The Maslach Burnout Inventory was completed by all 105 participants. The emotional exhaustion subscale mean was 29.22 (SD = 13.673), a high experience of emotional exhaustion. The depersonalization subscale mean was 8.72 (SD = 6.896), a moderate experience of depersonalization. The personal accomplishment subscale mean was 35.80 (SD = 7.652), a moderate sense of personal accomplishment. Table 1 shows the frequencies and percentages of score categories for the three burnout subscales:

Table 1

Frequencies and Percentages of Score Categories for Emotional Exhaustion, Depersonalization, and Personal Accomplishment

Category	Frequency	% of Total
Emotional Exhaustion		
Low	24	23
Moderate	17	16
High	64	61
Depersonalization		
Low	60	57
Moderate	15	14
High	30	29
Personal Accomplishment *		
Low	56	53
Moderate	24	23
High	25	24

Note. *Reflects higher scores with lower experiences of burnout.

Correlational analysis was completed and determined all three subscales (emotional exhaustion, depersonalization, and personal accomplishment) were significantly correlated with each other. Emotional exhaustion positively correlated with depersonalization ($r = .761$, $P < .001$). Emotional exhaustion negatively correlated with personal accomplishment ($r = -.258$, $P = .008$). Personal accomplishment negatively corrected with depersonalization ($r = -.273$, $P = .005$).

Question 2: Is a nurse's experience of emotional support provided by supervisors related to burnout?

The emotional support statements were completed by all 105 participants. The Likert scale ranged from one to four, leading to totals ranging from four to 16. The emotional support statements had a mean of 10.5 (SD = 3.423). An average of 10.5 indicates the average response for these statements was between two (*rarely*) and three (*often*).

Correlational analysis determined that emotional support was significantly negatively correlated with the emotional exhaustion subscale ($r = -.271$, $P = .003$). Correlational analysis

determined that emotional support was significantly positively correlated with personal accomplishment ($r = .531$, $P < .001$). Correlational analysis determined that emotional support was not correlated with depersonalization ($r = -.149$, $P = .065$).

Question 3: Is a nurse's experience of instrumental support provided by supervisors related to burnout?

The instrumental support statements were completed by all 105 participants. The Likert scale ranged from one (*never*) to four (*always*), leading to totals ranging from four to 16. The instrumental support statements had a mean of 8.83 (SD = 3.454). An average of 8.83 indicates the average response for these statements was between two (*rarely*) and three (*often*).

Correlational analysis determined that instrumental support was significantly negatively correlated with emotional exhaustion ($r = -.282$, $P = .002$). Correlational analysis determined that instrumental support was significantly positively correlated with personal accomplishment ($r = .664$, $P < .001$). Correlational analysis determined that instrumental support was not correlated with depersonalization ($r = .097$, $P = .163$).

Question 4: Is a nurse's perception of job control and decision-making ability related to burnout?

The Dwyer and Ganster job control and decision-making questionnaire was completed by all 105 participants. The Likert scale ranged from zero (*very little*) to four (*very much*). Total scores could have ranged from 22 to 110. The actual range of scores was 27 to 106. The mean job control and decision-making response total was 59.11 (SD = 19.291). An average of 59.11 indicates the average response for these statements was between two (*little control*) and three (*moderate control*).

Correlational analysis determined that both emotional exhaustion ($r = -.062$, $P = .266$) and depersonalization ($r = -.019$ $P = .424$) were not correlated with job control and decision-making.

Correlational analysis determined that job control and decision-making are significantly positively correlated with personal accomplishment ($r = .510$, $P < .001$).

Exploratory Analysis

A one-way between subjects ANOVA was conducted to compare the effect of department on the components of burnout (emotional exhaustion, depersonalization, and a sense of personal accomplishment). There was a significant effect of department on emotional exhaustion at the $p < .05$ level for the six conditions [$F(5, 99) = 13.674$, $p < .001$]. There was a significant effect of department on depersonalization at the $p < .05$ level for the six conditions [$F(5, 99) = 6.066$, $p < .001$]. There was a significant effect of department on sense of personal accomplishment at the $p < .05$ level for the six conditions [$F(5, 99) = 3.575$, $p = .005$]. Further analysis was not conducted on this data because the sample sizes from each department were small.

Discussion

The current study examined the experience of burnout among full-time nurses working in a hospital setting toward the end of the COVID-19 public health emergency and how that experience of burnout related to job control, emotional support from supervisors, and instrumental support from supervisors. Burnout in nurses is very common and expected to continue rising (Denning et al., 2021; Shah et al., 2021; Woo et al., 2020). Burnout contributes to several negative factors and experiences including increased risk for substance abuse (Patel & Keswani, 2019), depression (Alkhamees et al., 2021; Peterson et al., 2008), anxiety (Benincasa et al., 2022; Peterson et al., 2008), sleep disturbances (Peterson et al., 2008), and relationship strains (Patel & Keswani, 2019). When individual workers were burnt out, they were more likely to make medical errors (Vahedian-Azimi et al., 2019), take sick time (Whittington et al., 2021),

or leave their position entirely (Shah et al., 2021). These consequences of burnout were found to negatively impact companies as sick time led to decreased workforce productivity (Whittington et al., 2021) and staffing shortages (Spurlock, 2020) and mistakes (Van Bogaert et al., 2013). Furthermore, nurses who experienced burnout were more likely to leave the profession, furthering the nursing shortage in the United States (Shah et al., 2021).

Data collection for this study was completed during Spring 2023, a time when COVID-19 infection rates and hospitalizations were trending downward. Test positivity rates were trending downward from about 7% in mid-March to 5% in mid-April. Hospitalizations numbers went down from 24,000 in mid-March to 16,000 in mid-April (The New York Times, 2024). However, the negative effects from the nursing shortage, the COVID-19 pandemic, and large-scale burnout across the field of nursing in the United States had likely already taken place.

By looking at perceived support from supervisors and the impact of the hospital system, this study viewed the effects of burnout as an organizational and system-level problem rather than an individual employee problem. Previous studies also viewed burnout from a systems lens, identifying the importance of workplace support (Eriksson et al., 2009), of workplace efficiency (Shanafelt & Noseworthy, 2017), and workplace community (Shanafelt & Noseworthy, 2017; Eriksson et al., 2009) to help keep the experience of burnout low. Hospital administrators and nursing supervisors may benefit from specified training on burnout and how their ways of supporting nurses may relate to burnout of nurses. Supervisors may benefit from being more aware of emotional and instrumental support. Hospital systems may benefit from being aware of the perceptions of job control and decision making. Emotional support, instrumental support, and job control and decision making have all been significantly correlated with burnout. However,

cause and effect cannot be drawn from this correlational study and so it remains unknown whether burnout follows lack of support or lack of support follows burnout.

Nurses surveyed reported high rates of emotional exhaustion, moderate rates of depersonalization, and moderate rates of personal accomplishment on average. Compared to Guntupalli et al. (2014), participants in this study reported higher rates of emotional exhaustion and depersonalization. This study reported a broader range of scores for sense of personal accomplishment, with results for both the high rates and low rates being higher than results in Guntupalli et al. (2014). The context when this study was conducted is important to consider. Data were collected two-and-a-half years into the COVID-19 pandemic, a time of heightened stress for healthcare workers, particularly nurses, which increased the likelihood of developing burnout (Denning et al., 2021). The difference between the two studies may be explained by the timing of data collection and the negative impact the COVID-19 pandemic had on nurses.

Cotel and colleagues (2021) reported 14.5% of healthcare workers surveyed were experiencing emotional exhaustion whereas data from this study found 61% of nurses were experiencing high levels of emotional exhaustion. There were a few differences between Cotel and colleagues (2021) and the current study. Cotel and colleagues (2021) studied Romanian healthcare workers, had a larger sample size (N = 523), and data collection happened about three years prior to the current study. The significantly larger rates of burnout found in the current study may be due to American nurses experiencing worse emotional exhaustion than Romanian healthcare workers, the negative impact of the COVID-19 pandemic being fully experienced by nurses, or the smaller sample size in this study not necessarily being generalizable to a larger population. Denning et al. (2021) reported 67% of healthcare workers were experiencing burnout. Denning et al. (2021) utilized the Oldenburg Burnout Inventory whereas this study

utilized the Maslach Burnout Inventory, which does not report a total burnout score and instead, uses three subscales (emotional exhaustion, depersonalization, and personal accomplishment) to describe burnout. The subscales give researchers and hospital administrators more specific areas of concern rather than indicating someone is or is not experiencing burnout. Neither Cotel et al. (2021) nor Denning et al. (2021) looked specifically at nurses, whereas the present study did, providing more specific data to the literature.

The data analysis of survey responses indicated that nurses' experiences of perceived emotional support from supervisors were significantly correlated with different aspects of burnout. Nurses who reported higher levels of perceived emotional support from supervisors reported lower experiences of emotional exhaustion and higher levels of a sense of personal accomplishment at significant levels. Results from this study were similar to previous studies that also analyzed the relationship between perceived support and burnout (Denning et al., 2021; Mathieu et al., 2019). However, neither of these studies specifically looked at the emotional support coming from supervisors, rather looking at emotional support in general that nurses experienced. Nurses' perception of emotional support from supervisors may have had an impact on their emotional exhaustion and personal accomplishment levels. However, nurses may also have had lower rates of emotional exhaustion and higher rates of personal accomplishment to begin with, which could have helped them be more aware of potential emotional support.

Previous studies identified instrumental support as one way prevent burnout (Mathieu et al., 2019). This study specifically examined the perceived instrumental support coming directly from supervisors. Data analysis provided information about the relationship between perceived instrumental support and the experiences of burnout. Nurses' experiences of emotional exhaustion and depersonalization were negatively correlated with higher levels of perceived

instrumental support from supervisors. Nurses were more likely to report higher levels of both perceived instrumental and perceived emotional support if they also reported higher levels of senses of personal accomplishment. Nurses who feel better about the work they do may be more open to support from supervisors or nurses who feel they receive a lot of support from supervisors may be more likely to report feeling good about the work they do. Higher levels of senses of personal accomplishment reflect lower experiences of burnout. Hospital administrators may benefit from regular assessment of nursing staffs' senses of personal accomplishment.

Both perceived emotional support and instrumental support coming from supervisors had relationships with the experience of burnout that was similar to previous studies. While directional causation cannot be inferred, the importance of the perception of support from supervisors can be taken away from this study. It is also important to note how nurses perceive said support, as that may impact the way they experience and then report the supervisory support. This study was unable to conclude whether nurses who received more supervisory support were less likely to experience burnout or nurses who were less likely to experience burnout were more likely to benefit from supervisory support. However, it may be beneficial for administration and management to consider the ways they implement support on different hospital units. For example, providing a safe and respectful place for nurses to voice frustrations or concerns regarding workplace stressors (Mathieu et al., 2019), allowing nurses to take their full break and mealtimes without concern of who will cover their patients (Hurtado et al., 2015), or assisting nurses with patient care are aspects of the job a supervisor (Mathieu et al., 2019) can increase emotional and instrumental support. Nurses in this survey reported less perceived instrumental support than emotional support; hospital administrators would gain valuable information from assessing their nursing staff for specific ways to improve the perception of instrumental support.

Nurses who were able to have more job control and decision-making ability while at work reported higher levels of personal accomplishment. The JD-R model predicted that higher job demand and fewer available resources were contributing factors to burnout (Demerouti et al., 2001). Job control and decision-making around one's job, access to emotional support, and access to instrumental support are ways to increase resources for nurses. Dwyer and Ganster (1991) found that more job control decreased the likelihood of negative outcomes for workers. While nurses are not able to control many aspects of their work (i.e., physical aspects such as lighting or temperature), there are areas in which nurses' control can be increased. Hospital administrators and nursing supervisors may benefit from working to reduce excess responsibilities beyond patient care, giving nurses on the floor the ability to provide opinions related to policy change, and giving nurses flexibility in choosing how they care for patients. It is important for nurses to feel heard and understood and be able to have the decisions they make on the job supported by their supervisors.

Nurses may also benefit from policy and institutional level changes. Prior research (Spurlock, 2020) and newspaper articles (Castillo, 2022; Sasic, 2022) have found that nurses feel they need to do more work than is fair due to staffing shortages. New ways of incentivizing nurses may be helpful when considering how burnout effects nurses, such as adjusting shifts, providing more PTO, or having more administrative assistance on the unit for nonclinical issues are some considerations institutions may consider. The impact of travel nursing should also be considered, as travel nursing helps the nursing shortage, but hurts long-term workforce retention (Westhead, 2023; Weston, 2022; Yang & Mason, 2022).

Limitations

As with all studies, this study has its limitations. One of the largest limitations was the method of sampling. Convenience sampling and snowball sampling are less likely to provide a

wide range of diverse participants, thus this study's data may not be representative of all nurses. The survey was also only open for about five weeks due to the minimum number of needed respondents being met in that time. Had the survey been open longer, there might have been more participants or more diverse perspectives.

This dissertation also relied on self-report data. Nurses reported on their subjective experience, which is open to bias. The measures and statements used in the survey were face valid. Nurses may have been motivated to appear a specific way or report a certain level of support or control.

Another limitation of the study is the correlation design; causation cannot be drawn from the data. The data can only be utilized to make inferences or possible areas of focus for hospital administrators and nursing supervisors. Furthermore, two of the measures used were created for this study based on the literature and were not empirically standardized or validated. The measures created have not been proven to measure what they were used to measure in this study in the same way the Maslach Burnout Inventory and Dwyer and Ganster job control measures have been.

The high level of turnover in the nursing field also limits the impact of any potential intervention for burnout. Some of the nurses surveyed may have started after a hospital implemented interventions geared towards reducing or preventing burnout, but those nurses were unaware due to starting after the interventions took place. New staff would not know what it was like working at the hospital before the interventions, so their experience of burnout is from after the interventions. Also, the interventions put into place were more likely to be based on the needs of the nurses who may not even be working there anymore, rather than the needs of newly hired nurses. Research has demonstrated the importance of considering the needs of the staff to implement effective interventions (Theorell, 2012).

Finally, data were collected during the COVID-19 pandemic and results may not be generalizable to nurses at other points in history. Rates of burnout found in this study may have been higher due to the COVID-19 pandemic, which was found to increase rates of burnout (Denning et al., 2021).

Recommendations for Future Research

This research aligned with previous research; however, the correlational design does not inform us about necessary steps to reduce burnout. It is important that burnout prevention and burnout reduction be viewed as a system-level priority. Organization-wide interventions aimed at reducing burnout might be implemented and evaluated as to whether or not burnout is reduced in response to those changes.

Continued collection of data beyond the COVID-19 pandemic is also important, as this study captured the experience of burnout during a specific time in history. Rates of burnout are likely to change as new challenges or easier ways of working arise.

Future research in this area should also be expanded to include other types of healthcare workers and others working in medical settings, such as medical assistants working in outpatient clinics, hospital cleaning staff, or various technicians. There are many types of workers in healthcare settings who are at risk of developing burnout that goes unnoticed due to job title or training level.

Exploratory statistical analysis showed a significant difference between departments survey respondents worked in. However, due to small sample sizes, no further analysis was conducted. Woo and colleagues (2020) found differences between departments, with intensive and critical care nurses experiencing the highest rates of burnout. Future research about differences in burnout based on department may be beneficial and add more nuance to the literature.

Conclusions

Nurses are essential to the healthcare system and to maintain the healthcare system, yet there is an ongoing nursing shortage. We need good nurses to stay in the field to maintain quality care for patients. The nursing shortage started before the COVID-19 pandemic and there continues to be a problem with nurses leaving the field. Keeping good nurses for entire careers can in part be done by reducing current and future burnout.

Nurses in this study were found to be experiencing high levels of emotional exhaustion, moderate levels of depersonalization, and moderate levels of feelings of personal accomplishment, indicating a higher than optimal overall level of burnout. High levels of burnout are one factor contributing to the nursing shortage and nurses' intention to leave the profession. As confirmed in this study, there is a correlation between higher levels of support from supervisors and hospital systems and lower levels of burnout. Appropriate staffing levels (Spurlock, 2020), taking meal breaks (Hurtado et al., 2015; Whittington et al., 2021), feeling heard and understood (Mathieu et al., 2019), and receiving tangible help throughout the shift (Mathieu et al., 2019; Xu & Burleson, 2001) are all methods to provide support. Taking care of nurses is key to keeping our healthcare systems running well. The need to reduce current burnout and prevent future burnout is high given the struggles since the start of the pandemic. Discovering and implementing ways to prevent burnout will help maintain an effective nursing workforce as new challenges for healthcare and nurses continue to develop.

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Appendix A: Informed consent prior to survey

Dear Participant,

My name is Shannon McCleery and I am a doctoral candidate at Antioch University New England doing research for my dissertation. This is a survey looking at the different levels of well-being nurses may be experiencing and the level of managerial support they experience while at work. This survey will give you an opportunity to share how you have been feeling and how you have been perceiving your job control, job decision making abilities, and job support.

There are minimal, if any, risks from participating. Your identity will be anonymous. You will not be asked for your name and all demographic data being collected will be reported as aggregated information. No personally identifiable information will be associated with your responses in any reports of these data. The survey will take approximately 15-20 minutes to complete.

Your participation is voluntary, and you may elect to discontinue your participation at any time. If you decide to stop taking the survey at any time, you will not be penalized in any way.

This survey is part of a dissertation research project at Antioch University New England in the Clinical Psychology department. If you have any questions about this survey or the research project, please contact Shannon McCleery, at xxxxxxx@xxxxx.xxx or my dissertation chairperson, Kathi Borden, at xxxxx@xxxxx.xxx

This project has been approved by the Institutional Review Board at Antioch University. If you have any questions about your rights as a research participant, please contact Kevin Lyness, chair of the Antioch University New England Institutional Review Board, at xxxxx@xxxxx.xxx or Dr. Shawn Fitzgerald, Antioch University New England provost and campus CEO, at xxxxx@xxxxx.xxx.

By clicking “Next” below, I am indicating that I have read and understood this consent form and agree to participate in this research study and that I am 18 years or older.

Please feel free to save or print a copy of this page for your records.

Thank you for your participation!

Appendix B: Recruitment blurb

Calling all nurses! My name is Shannon McCleery. I am a doctoral candidate at Antioch University New England in the process of completing my dissertation. I am looking for full time RNs and BSNs currently doing direct patient care to participate in a survey looking at the connection between rates of employee well-being and managerial support. The only exception to this survey is surgical nurses. It is important to me that the voices of nurses be heard in understanding how employee well-being affects nurses and how workplace support may help increase well-being. This survey will take between 15 and 20 minutes. I very much appreciate you taking the time to complete this survey! Please complete this survey and feel free to share the link with fellow nurses.

Thank you!

Appendix C: Survey

The following appendix is the survey which was administered to participants. This survey includes the following copyrighted material: MBI:HSS (MP) and Work Control Scale.

Dwyer, D. J., & Ganster, D. C. (1991). The effects of job demands and control on employee attendance and satisfaction. Journal of Organizational Behavior, 12(7), 595–608. https://doi.org/10.1002/job.4030120704

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Demographics Section

1. Years licensed/registered as a nurse: _____
2. Please check which credential you hold:
    a. RN
    b. BSN
3. Department(s) currently working in: _____
4. Did you get reassigned to another department/specialty during the pandemic?
    - Yes
    - No
5. Race/Ethnicity (Select all that apply)
    - White/Caucasian
    - Black/African American
    - Latinx/Hispanic
    - Asian/Asian American/Pacific Islander
    - Native/Alaska Native
    - Some other race
6. Gender Identity (Select all that apply)
    - Female
    - Male
    - Trans
    - Nonbinary
    - Prefer not to answer

MBI:HSS (MP)

As per the MBI:HSS (MP) license agreement only three sample items appear in this dissertation.

I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

Work Control Scale—Likert Scale: 1. Very little 2. Little 3. A moderate amount 4. Much 5. Very much

1. How much control do you have over the variety of methods you use in completing your work?
2. How much can you choose among a variety of tasks or projects to do?
3. How much control do you have personally over the quality of your work?
4. How much can you generally predict the amount of work you will have to do on any given day?
5. How much control do you have personally over how much work you get done?
6. How much control do you have over how quickly or slowly you have to work?
7. How much control do you have over the scheduling and duration of your rest breaks?
8. How much control do you have over when you come to work and leave?
9. How much control do you have over when you take vacation or days off?
10. How much are you able to predict what the results of decisions you make on the job will be?
11. How much are you able to decorate, rearrange, or personalize your work area?
12. How much can you control the physical conditions of your work station (lighting, temperature)?
13. How much control do you have over how you do your work?
14. How much can you control when and how much you interact with others at work?
15. How much influence do you have over the policies and procedures in your work unit?
16. How much control do you have over the sources of information you need to?
17. How much are things that affect you at work predictable, even if you can't directly control them?
18. How much control do you have over the amount of resources (tools, material) you get?
19. How much can you control the number of times you are interrupted while you work?
20. How much control do you have over the amount you earn at your job?
21. How much control do you have over how your work is evaluated?
22. In general, how much overall control do you have over work and work-related matters?

Instrumental support—Likert Scale: 1. Never 2. Rarely 3. Often 4. All the time

1. My supervisor will cover my patients if I need them to.
2. My supervisor directly helps me with patients when I need it.
3. My supervisor supports me in taking my break during my shift.
4. My supervisor offers to teach me new skills or help me brush up on old skills.

Emotional support—Likert Scale: 1. Never 2. Rarely 3. Often 4. All the time

1. My supervisor expresses understanding of my stress or expresses feeling similar stress.
2. My supervisor comforts me when I am overwhelmed.
3. My supervisor offers attentive comments when I speak.
4. I can talk to my supervisor about what is bothering me.

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I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some recipients.

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I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

MBI - Educators Survey - MBI-ES:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some students.

Cont'd on next page

MBI - General Survey - MBI-GS:
I feel emotionally drained from my work.
In my opinion, I am good at my job.
I doubt the significance of my work.

MBI - General Survey for Students - MBI-GS (S):
I feel emotionally drained by my studies.
In my opinion, I am a good student.
I doubt the significance of my studies.

Sincerely,

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