

**Investigating the concept of mattering as a nurse
within the context of the health care work environment**

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Dedication

For my parents, Bob and Rita Yoder, who instilled in me a love of learning and teaching. Thank
you for your legacy of faith and perseverance.

For my daughter, Naomi Marie Hall, my greatest gift. Being your momma is my crowning
achievement. I love you most.

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Chapter 1: Introduction

Investigating the concept of mattering as a nurse within the context of the health
care work environment

ABSTRACT**Background:**

Mattering is the feeling that a person makes a difference and is significant to others. Whether one matters to a loved one, friend, organization, or society, it is an essential psychological condition for thriving and flourishing and is endorsed by the U.S. Surgeon General as critical part of a healthy work environment. When employees matter at work they report increased productivity, engagement, intention to stay at their jobs, and are less likely to experience burnout and depression. Nurses need to know they matter, not only to their patients, but to their peers, physicians, administration, and the health care organization. Mattering is understudied among nurses and significant knowledge gaps prevent the integration of mattering into interventions to improve the health care work environment.

Purpose:

The purpose of this dissertation study was to explore mattering as a nurse within the health care work environment and identify aspects of the work environment such as the hospital ethical climate that play a role in how nurses perceive they matter.

Methods:

A convergent, parallel mixed-method study was conducted. Quantitative (survey questionnaire) and qualitative data (individual interviews) were collected concurrently and analyzed separately before they were converged to illustrate different ways that nurses expressed they mattered and what aspects of the work environment influenced these perceptions. Additionally, a systematic scoping review was completed to: synthesize the literature on mattering at work in general, identify key concepts and measurement methods of mattering within the context of work, and examine how mattering has been incorporated into work environments.

Mixed-method study results:

For the convergent, parallel mixed-method study, 243 registered nurses completed a Qualtrics survey and a sub-group of these nurses (n=22) participated in individual interviews. Significantly lower mattering scores were found in nurses who identified as a minority race other than Black or White ($\beta = -3.03$, $p < .01$), worked at small hospitals (< 100 beds; $\beta = -2.26$, $p < .05$), or at hospitals with nursing unions ($\beta = -1.90$, $p < .05$). Significantly higher mattering scores were found in nurses who worked at hospitals with formal award programs ($\beta = 2.85$, $p < .01$), and had nursing certifications ($\beta = 1.56$, $p < .05$). Mattering at work was significantly and positively correlated with the hospital ethical climate and its five factors: hospital, management, peers, patients, and physicians.

The following themes were inductively developed from nurses' experiences of mattering within the health care work environment: 1) Support and resources necessary for mattering, 2) Leadership's role in mattering, 3) Mattering when making a difference for patients, 4) Interprofessional relationships with peers affect mattering, 5) Mattering when collaborating with physicians.

Focusing specifically on aspects of the work environment that influenced nurses' perceptions of mattering that can be targeted by interventions, the following themes were deductively developed from interviews: 1) Mattering as an individual, 2) Having a voice is important for mattering, 3) Recognition and appreciation support mattering, 4) Attending to well-being enhances mattering. Recommendations for workplace changes to enhance nurse mattering were made based on themes and participants' suggestions.

Scoping review results:

A scoping review of the literature regarding mattering at work resulted in a total of 294 journal articles; 32 remained for full analysis after applying inclusion and exclusion criteria. Definitions, measurements, and characteristics of mattering at work were analyzed and implications for mattering among health care workers in the health care work environment were discussed.

Conclusion:

The feeling that one matters at work is essential for nurse well-being. Through mattering nurses are connected to the meaning of work, relationships with others, and their impact in society. While perceptions of mattering leads to enhanced engagement, belonging, resilience, and job satisfaction, the absence of mattering can lead to burnout, turnover, and depression. Mattering is an essential part of a healthy work environment. Nurses in this study discussed facets of the health care work environment that influenced how they felt valued as well as ways that they were able to add value. Health care organizations have a responsibility to address the well-being of their nurses and take steps to enhance perceptions of mattering within the health care work environment. Addressing these work environment elements may cause nurses to feel that they are valued members of the health care organization and lead to improvements in nursing burnout, turnover, and well-being.

SPECIFIC AIMS

The U.S. nursing workforce is in crisis. Changes in the health care work environment, due to health care reform and the prioritization of corporate values, negatively affected the well-being of nurses over the past decades (Peter et al., 2004), but the unsafe working conditions of the COVID-19 pandemic negatively impacted health care work environments and caused a critical shortage of nursing care due to unprecedented nursing turnover rates (Aiken, 2021; Lowman & Harms, 2022).

A healthy work environment is critical for ensuring patient safety, care quality, nursing satisfaction, and nursing retention (Lowman & Harms, 2022; Wei et al., 2018). Yet, nurses report negative work environment conditions such as higher levels of moral distress, burnout, value misalignment, inadequate support from leadership, and toxic work climates (Dyrbye et al., 2017; Rinne et al., 2019; Roush, 2022). The health care work environment is a significant contributor to the nursing care shortage (Lowman & Harms, 2022). When nurses are in environments where they lack value, have limited authority and power in decision making, or do not have the ability to voice concerns or take action on those concerns, their work environments can become “morally uninhabitable” (Peter et al., 2004, p. 358).

The ethical work climate, a component of the work environment characterized by employee perceptions of the organizations’ ethical practices and procedures, influences decision-making, organizational commitment, job satisfaction, and psychological well-being (Lemmenes et al., 2018). When the work environment is rewarding, empowering, supportive, and employees feel that their contributions are valued, clinicians feel that they matter to the organization and are more likely to stay in the profession (Prilleltensky, 2020). Mattering to others, whether it is a loved one, friend, organization, or society, is an essential psychological condition for thriving and flourishing (Flett, 2022). However, over 30% of nurses do not feel valued by their employer,

while 47% report that their work negatively affects their health and well-being (American Nurses Foundation, 2021).

The construct of mattering, characterized by feeling valued and adding value (Prilleltensky, 2020) is associated with an enhanced sense of well-being, self-esteem, self-efficacy, job satisfaction, and workplace meaning (Hopkins, 2021; Reece et al., 2021; Rosenberg & McCullough, 1981). In non-health care workplaces, the extent to which employees perceived that their organizations valued their contributions strongly predicted their job productivity, was positively correlated with their intentions to stay, and negatively correlated with turnover intentions (Kurtessis et al., 2017; Reece et al., 2021). Two recent studies found a negative correlation between mattering, nursing burnout, and nursing turnover (Haizlip et al., 2020; Mohamed et al., 2021). Both posited that organizational attention to mattering may be an upstream solution to nurse burnout and turnover and that targeted interventions to enhance nurses' perceptions of mattering may also be useful for making systemic changes to the nursing work environment (Haizlip et al., 2020; Mohamed et al., 2021).

Mattering is understudied among nurses and significant knowledge gaps prevent the integration of mattering into interventions to improve the health care work environment. To address these gaps and to explore mattering as a nurse within the health care work environment, a convergent, mixed-method dissertation study is proposed with the following aims:

Aim 1: Evaluate levels of nurse mattering and ethical climates within the health care work environment. The Work Mattering Scale (WMS) and the Hospital Ethical Climate Survey (HECS-SF) were administered to acute and critical care nurses (n=243) currently licensed and employed in the United States. Background demographic information from the nurses and

workplace characteristics regarding their individual health care work environments were gathered.

Aim 2: Describe the role of the health care work environment (work characteristics, ethical climate) in nurses' experiences of mattering. Acute and critical care nurses (n=22) completing the quantitative survey for Aim 1 were invited to complete an additional qualitative semi-structured interview to explore experiences of mattering and the healthcare work environment in shaping experiences.

Aim 3: Integrate experiences of nurse mattering in the health care work environment with outcomes of the WMS and HECS measurements. After initial and individual data analysis of Aims 1 and 2, findings were integrated to enhance the understanding of nurse mattering within the health care work environment.

Changes to the health care work environment are critical for improving the nursing care crisis by reducing nursing burnout, turnover, and improving nurses' well-being. This dissertation study addressed the gap in knowledge regarding mattering as a nurse in the health care work environment as well as the aims of the Nursing Staffing Think Tank implemented by the American Association of Critical-Care Nurses, the American Nurses Association, and others regarding the improvement of health work environments for nurses (Kennedy, 2022; Partners for Nurse Staffing Think Tank, 2022).

BACKGROUND AND SIGNIFICANCE

The concept of mattering was first introduced by social psychologists Rosenberg and McCullough in 1981 (Jung, 2015). Attention, importance, and dependence were originally defined as the foundational dimensions of mattering. In the following years ego extension, knowing that you matter because similar emotions and reactions occur with people you are connected to, individuation, feeling that your unique identity is understood, and appreciation were later added by Rosenberg (1985), Maslach et al. (1985), and Schlossberg (1989), respectively (Flett, 2018).

Mattering can be further described in different contexts (Rosenberg & McCullough, 1981). Interpersonal mattering focuses on individual relationships and mattering to someone specific while societal mattering is defined as the significance of mattering to society as a whole (Rosenberg & McCullough, 1981). Rosenberg and McCullough (1981) considered societal mattering one of the main forces binding people to society and argued, “Humans cannot survive, or even be truly human, without other people” (p180).

Prilleltensky (2020) illustrated mattering as a balance of the key psychological experiences of feeling valued and adding value. He posited, “To matter, it is not enough to feel appreciated and recognized...To feel fully human, and to matter, we need skills and opportunities to add value, to make a contribution, to ourselves and others” (Prilleltensky, 2020, p. 19). The need to matter as individuals is shaped by survival instincts, social desires, and existential identity while the need to contribute value to our environment is driven by self-determination, self-efficacy, and meaning in life (Prilleltensky, 2020). Similarly, Reece et al. (2021) focused on the objective consequences of individual actions as well as the subjective perceptions of individuals. This view of “action-oriented” mattering encompasses an individual’s capacity for action through self-efficacy (Reece et al., 2021, p. 229). The impact of an individual’s actions on

the environment is the most relevant sense of mattering within an organization (Reece et al., 2021).

Organizational mattering centers on the identity and belonging of employees within an organization (Jung, 2015). Also known as “mattering at work”, organizational mattering combines interpersonal and societal mattering, centering specifically on the work setting (Jung, 2015, p. 196). The actions of employees impact their work environment and this influence frames perceptions of mattering at work (Reece et al., 2021). Interpersonal mattering within the workplace influences the perception of the work itself as well as an individual’s feeling of recognition, value, and appreciation within the organization (Haizlip et al., 2020; Jung, 2015). How an individual views their work as contributing to the needs of society and how their work is perceived by society is influenced by societal mattering (Flett & Heisel, 2020). Few studies have explored mattering at work in health care work organizations and none have explored the relationship between mattering at work and the ethical climate of the workplace. This is a critical lack of knowledge as healthcare organizations, still reeling from the COVID-19 pandemic, must address a staffing crisis that involves work environment factors as negative influencers (Woodward & Willgerodt, 2022).

The US healthcare system, its organizations and nurses, are suffering and mattering may make a difference. The U.S. health care system is a unique work environment that includes over 5,100 hospitals, 15,000 nursing homes, 1,800 inpatient mental health facilities, and 12,000 home health agencies that collectively employ over 22 million health care providers (Shi & Singh, 2022). With a total of 4.3 million registered nurses, the U.S. nursing profession is the nation’s largest group of health care providers (American Association of Colleges of Nursing, 2019; American Nurses Association, 2022). Before the COVID-19 pandemic, burnout levels among

U.S. nurses were high and staff turnover was already affecting the health care system (Aiken, 2021). An analysis of the 2018 Department of U.S. Health Resources and Services Administration (HRSA) Bureau of Health's National Sample Survey of Registered Nurses (NSSRN) public dataset revealed 28% (n=1512) of nurses who left their places of employment in 2017 did so because of burnout, while 42% (n=8798) of those who remained employed considered leaving due to burnout (HRSA Workforce, 2019). Another analysis found that during the COVID-19 pandemic, however, burnout rates among critical care providers increased from 35% to 57% (Gomez et al., 2020).

Burnout, the “syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment,” (Maslach, 1982, p. 2) is pervasive in all levels of health care (Bodenheimer & Sinsky, 2014) and evidence-based interventions are greatly needed to address this critical issue (Dyrbye et al., 2017). Healthcare professionals are at high risk for burnout due to the nature of their work with patients (Chou et al., 2012), as well as their work environments (Rinne et al., 2020). The most frequently cited burnout stressors listed by healthcare providers are work characteristics not inherent to the position responsibilities but are related to the work conditions within the organization (Rinne et al., 2020). Frustration with the electronic health record, heavy workloads, and chaotic work atmospheres greatly contribute to stress and burnout among nurses (Kroth et al., 2019; Yen et al., 2020). Other organizational stressors include moral distress, misalignment with administration, inadequate support, negative workplace climate, work process inefficiencies, and lack of control, autonomy, and meaning (Dyrbye et al., 2017; Rinne et al., 2020). Researchers seeking solutions to health care provider burnout found a negative correlation between mattering, nursing burnout, and nursing turnover (Haizlip et al., 2020; Mohamed et al., 2021). They posited that mattering may be an upstream solution to

nursing burnout and turnover, and targeted interventions to enhance mattering may be useful for making systemic changes to the nursing work environment (Haizlip et al., 2020; Mohamed et al., 2021). Additional research on mattering as an upstream factor preventing burnout and other poor healthcare provider outcomes is needed.

Work environment characteristics impact nurse satisfaction and retention. Optimal nurse work environments are enabled when employees feel that their strengths and contributions to the organization are valued, effective communication is encouraged, and staff are empowered in their decisions and teamwork (Wei et al., 2018). Studies have found that hospitals with Magnet® designation have higher nurse satisfaction and nurse-assessed quality of patient care due to significant differences in the work environments (Reinhardt et al., 2020). Healthy work environments, significantly more common in Magnet® hospitals, were characterized by high quality patient care, adequate staffing, communication, collaboration, respect, safety, opportunities for nursing leadership, support for continuing education, and meaningful recognition (Reinhardt et al., 2020). Healthy work environments were positively correlated with the psychological health of nurses, job satisfaction, and retention and negatively correlated with emotional strain, burnout, and intentions to leave (Wei et al., 2018). Other workplace characteristics associated with healthy work environments were increased autonomy, positive nurse-physician relationships, and perceived organizational support.⁴ While Magnet® designation is not the only path towards creating healthy work environments, hospitals can prioritize administrative leadership support of nursing, shared governance, quality improvement projects, increased research networks, and continuing education for staff in order to make significant improvements in the work environment (Nelson-Brantley et al., 2018). These standards have not only been shown to positively impact nursing outcomes, but also significantly

improve patient outcomes such as decreased patient mortality, decreased pressure injuries and patient falls, and improved quality of care (Nelson-Brantley et al., 2018).

Health care organizations are moral communities wherein health care providers with widely varying roles and skillsets work toward the common moral purpose of attending to the well-being of vulnerable others (Epstein et al., 2020). This unique work environment is considered a moral community where moral identity and agency can be nurtured, and mutual responsibilities can be addressed through the values and beliefs that the members of the community hold (Liaschenko & Peter, 2016). The ethical climate of these communities consists of the moral obligations within the organization and the perceived existence of normative ethical patterns within the organization (Victor & Cullen, 1988). These practices and procedures that are representative of the organization, not the individual, make up the ethical culture of the organization (Victor & Cullen, 1988). The American Nurses Association (ANA) Code of Ethics states in Provision 6 that the nurse is responsible for establishing and maintaining the ethical work environment (American Nurses Association, 2015). Nurses are considered moral agents whose obligations include beneficence, nonmaleficence, justice, reparations, and respect for all persons (American Nurses Association, 2015).

The purpose of this dissertation study was to explore mattering as a nurse within the health care work environment and identify aspects of the work environment such as the hospital ethical climate that play a role in how nurses perceive they matter.

CONCEPTUAL FRAMEWORK

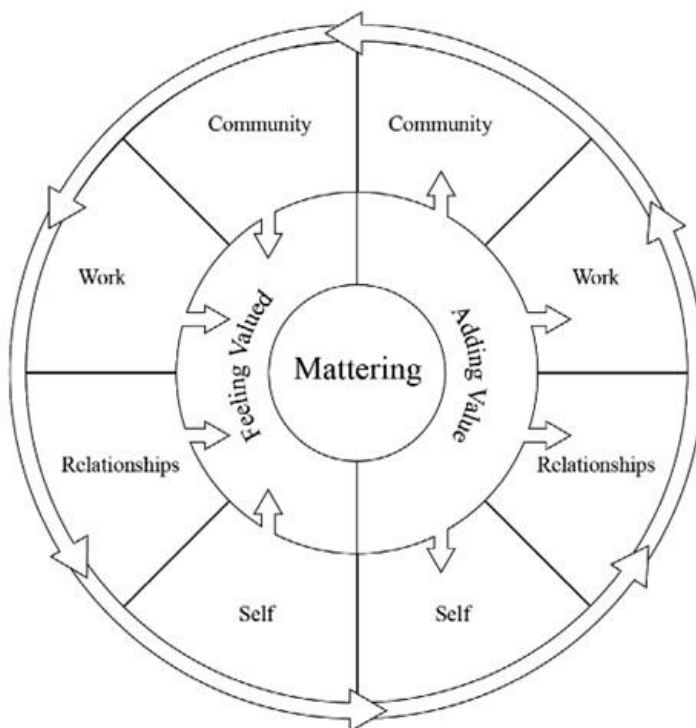
The study's data collection and analysis were guided by Prilleltensky's (2020) mattering conceptual framework. Based on the two psychological experiences of mattering, feeling valued and adding value, Prilleltensky illustrated mattering through a wheel that consisted of eight

sectors of mattering that provide sources and recipients of mattering in our lives (see Figure 1).

On the left-side of the wheel, the four sources of feeling valued include community, work, relationships, and self while on the right side, these same components are the recipients of value added through actions.

Prilleltensky argued that there must be a balance between caring for others and caring for oneself. He posited, “We have a certain amount of psychological energy to be invested in various aspects of mattering, and if we invest all of it in one bucket, there will be none left for others” (Prilleltensky, 2020, p. 22). When in balance, Prilleltensky calls the Mattering Wheel a “virtuous cycle” where feeling that you matter to others will more likely cause you to engage and positively impact others (Prilleltensky, 2020, p. 22). However, the opposite effect can occur when mattering is lacking, causing a “vicious cycle” of self-doubt, lack of self-esteem, and withdrawal from others (Prilleltensky, 2020, p. 22).

Figure 1: Prilleltensky's (2020) Mattering Wheel



For the proposed study, the work sectors of feeling valued and adding valued were measured through the WMS instrument. However, because each of the sectors are interrelated for overall mattering, participants' experiences of mattering within all sectors will also be explored through the semi-structured interview guide.

Victor and Cullen's (1988) Ethical Climate Theory (ECT) also provided a theoretical underpinning for the proposed study (see Figure 2). The ethical work climate was defined as, "the prevailing perceptions of typical organizational practices and procedures that have ethical content" (Victor & Cullen, 1988, p. 101). These perceptions of the organization are not synonymous with an individual's perceptions of ethical conduct; however, it is the "institutionalized" policies, procedures, and every-day practices that constitute the ethical work climate (Victor & Cullen, 1988, p. 103).

According to ECT, ethical climates within the workplace are comprised of ethical criteria used to make ethical decisions and sources of moral reasoning for those decisions. Principle is the adherence to laws or rules, benevolence is comprised of joint interests while egoism is driven by self-interests (Victor & Cullen, 1988).

For the proposed study, the locus of analysis explored through semi-structured interviews were at the individual (nurse) and local (health care organization) levels and the ethical criteria of principle and benevolence.

Figure 2: Victor & Cullen (1988) Theoretical ethical climate types

		LOCUS OF ANALYSIS		
		Individual	Local	Cosmopolitan
ETHICAL CRITERION	Egoism	Self-Interest*	Company Profit	Efficiency
	Benevolence	Friendship	Team Interest	Social Responsibility
	Principle	Personal Morality	Company Rules and Procedures	Laws and Professional Codes

*Typical decision criterion.

There are very few studies that examine mattering as a nurse or health care provider. This was the first study to explore the relationship between mattering within the health care work environment and the ethical climate of the work environment.

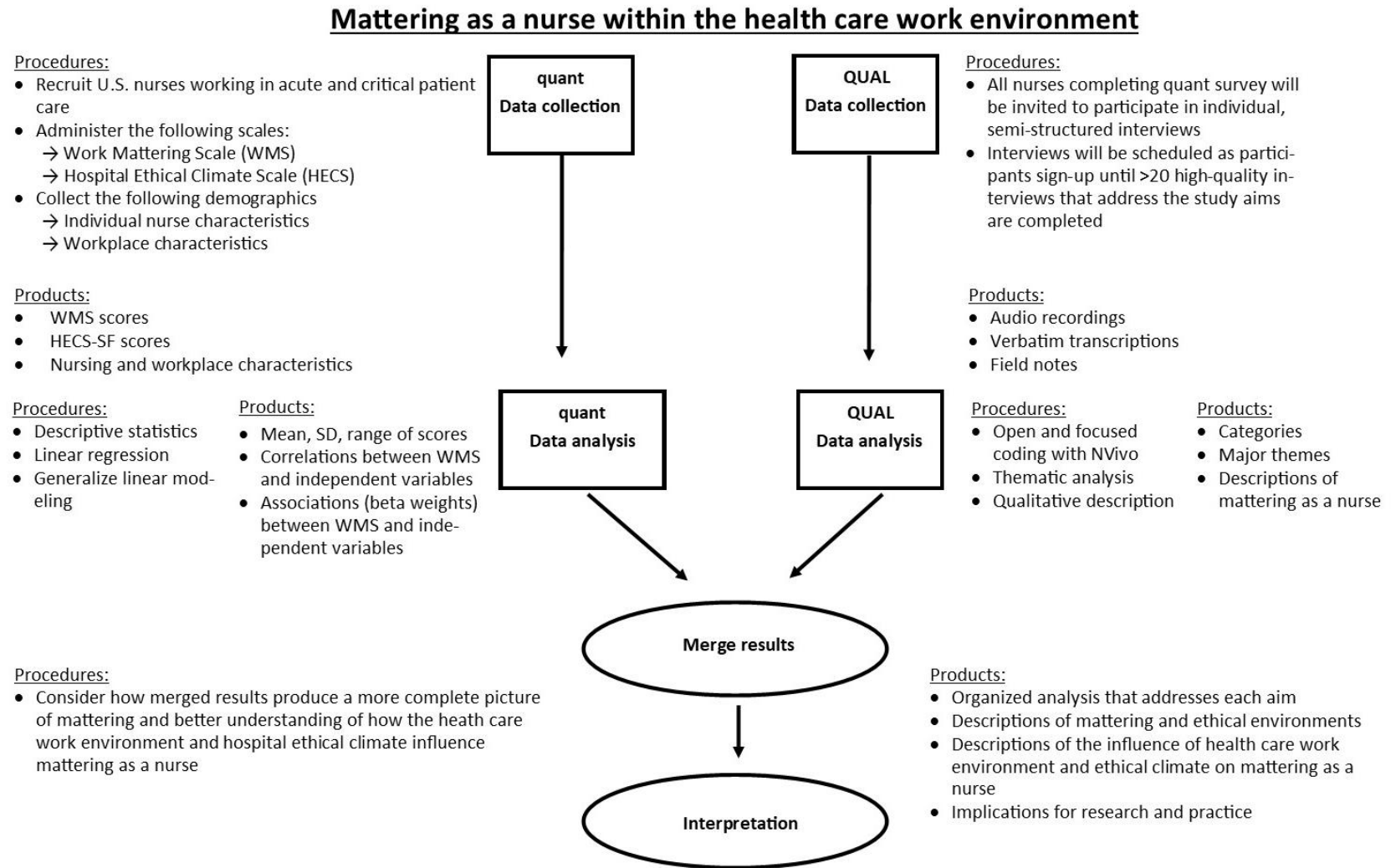
METHODS

Research design

A convergent, mixed-method approach, research design was best suited to answer the dissertation study's research aims (See Figure 3). Convergent designs enable researchers to obtain "different but complementary data" on a research topic (Creswell & Plano Clark, 2018, p. 68). By integrating the quantitative findings with the qualitative experiences, a more complete understanding of how nurses perceive they matter within the health care work environment and how the hospital ethical climate aligns with these perceptions of mattering was elucidated.

The study design was best illustrated with the following notation: quant + QUAL. The priority aim of the study was the qualitative phase because personal experiences of mattering within the health care work environment provided rich data for exploring the feelings, values, interpretations, and interplay of relationships, resources, and ethical climates that affect the well-being of nurses. The quantitative phase, however, provided important contextual details and framework for better understanding the perceptions and meanings that nurses placed on mattering in the health care work environment. The notation included an additional symbol to illustrate the use of two different types of data that was integrated to form a whole for interpretation. Both the quantitative and qualitative data collection phases were conducted simultaneously. Initial levels of data analysis were conducted independently and did not rely on the completion of one phase to complete the other. Once both phases were completed and initial quantitative and qualitative findings were reported, integration and mixing of the results occurred.

Figure 3: Convergent, parallel mixed-method research design



Sample and setting

Registered nurses licensed and currently employed in the United States were recruited virtually to participate in the study. Study advertisements and invitations were posted in online spaces such as Facebook groups, Twitter threads, and Instagram pages. Effective social media recruitment required understanding the social media preferences and concerns of the target of interest as well as the messaging norms of the particular platforms identified (Arigo et al., 2018). Therefore, a mix of recruitment strategies were used on various social media platforms including targeted online advertisements placed on these social network sites and national nursing organizations were tagged in social media recruitment posts.

Nurses currently employed throughout the U.S. were eligible to participate in the study if they provided direct patient care in an inpatient acute or critical care settings. Nurses of any race or ethnicity, gender, age, education, specialty area, full-time equivalent (FTE), or years of experience were eligible. However, nurses who were not currently practicing, those who were working in non-acute/critical care areas such as outpatient, laboratory, ambulatory, or long-term care settings, and advanced practice nurses were excluded. The reason for this exclusion was to focus on the unique health care work environment of the inpatient hospital. Nurses who did not provide direct patient care in positions such as quality assurance, management, research, etc. were also excluded to narrow the focus of the study on acute and critical care nurses. Prior research on mattering at work demonstrated an important distinction between mattering to coworkers and to supervisors (Haizlip et al., 2020; Jung & Heppner, 2017). Nurses who provided direct patient care were most often employed in a nursing care unit or within a resource pool that was managed by multiple levels of supervisors who did not typically provide patient care.

Therefore, to limit variability that was outside of the scope of this study, nurses who provided direct patient care were the primary sources for data collection.

The target sample size for the quantitative aim was 385 participants, calculated based on a margin of error of 0.05, within a 95% confidence level, and a critical value of ± 1.96 . The sample size for the qualitative aim was 30 participants, which was estimated by the breadth of the study aims, specificity necessary to address them, quality of dialogue, use of an established theoretical framework, and analytical strategy (Malterud et al., 2016). The quality of the dialogue also affected decisions by the researcher during data collection to recruit more participants, as needed (Malterud et al., 2016).

The two previous research studies that quantitatively evaluated nurse mattering, the only literature to-date on nurse mattering, utilized participant samples of 280 and 324 nurses (Haizlip et al., 2020; Mohamed et al., 2021). The focus of both of these studies was on reporting quantitative correlations between mattering and selected variables. The priority of this dissertation study will be to elaborate on findings from the quantitative instruments through exploration of personal experiences with an in-depth exploration into the meaning and perceptions of mattering using a qualitative approach, thus a smaller sample size is appropriate.

Instruments

The Work Mattering Scale (WMS) was a 10-item scale that measures both societal and interpersonal mattering within the context of the work environment (Jung & Heppner, 2017). Example questions included, “I think that society values the work I do” and “My coworkers/colleagues would be disappointed if they knew that I may leave my job.” Each question was answered using a 6-point Likert scale from 1= disagree very much to 6= agree very much with an estimated 10-minute completion time (Jung & Heppner, 2017). Total (summed)

scores ranged between 10-60 with higher scores indicating a higher sense of work mattering (Jung, 2015). Jung and Heppner (2017) reported an internal reliability coefficient of $\alpha=0.91$ for the WMS. Both Haizlip et al. (2020) and Mohamed et al. (2021) utilized the WMS in their correlation studies of mattering and nursing burnout and reported internal consistency reliabilities of $\alpha=0.89$ and $\alpha=0.80$, respectively. The WMS is provided in Appendix A.

The Hospital Ethical Climate Survey (HECS) was a 24-item survey developed through research from ECT, organizational climates, and ethical reflection (Olson, 1998). Designed by Olson in 1998 and validated with a registered nurse population, this questionnaire measured perceptions of the ethical climate in hospital work environments using a 5-point Likert scale ranging from 1=almost never true to 5= almost always true. Taking an estimated 15 minutes to complete, the total (summed) scores ranged from 26-130; higher scores indicating more positive ethical climate (Epstein et al., 2020; Olson, 1998). Olson (1998) reported an initial internal consistency reliability of $\alpha= 0.91$, and several other health care studies have also reported internal consistency reliabilities of $\alpha= 0.83-0.91$ (Hamric & Blackhall, 2007; Olson, 1998; Sauerland et al., 2014; Whitehead et al., 2015). The HECS was also translated by multiple researchers into Greek, Spanish, Swiss, Persian, Iranian, and Belgian (Cerit & Özveren, 2019; Charalambous et al., 2018; Claeys et al., 2014; Khalesi et al., 2014; Pergert et al., 2018; Rivaz et al., 2020; Rodriguez-Ruiz et al., 2021). The HECS is provided in Appendix A.

Nursing specific characteristics were gathered using demographic questions that included age, gender identity, race and ethnicity, years of experience, unit specialty, patient population, nursing degree, nursing certification, FTE, and shift worked. These individual nurse characteristics provided contextual details that were used to inform the qualitative findings. The demographic survey is provided in Appendix A.

Workplace characteristics were also gathered using demographics that included the size of the hospital where the nurse is currently employed, the type of hospital (e.g., academic medical center, community hospital, etc.), Magnet® designation, ethics resources, employee recognition program, clinical ladder or advancement opportunities. These workplace characteristics demonstrated systems within the health care work environment that provided opportunities for the organization to demonstrate they valued the contributions of their employees, that they cared about their well-being, and provided opportunities for employees to extend their organizational rights and influence organizational procedures (Masterson & Stamper, 2003). The workplace characteristics survey is provided in Appendix A.

Semi-structured interview

The individual interviews were semi-structured with broad questions informed by the conceptual framework of the mattering wheel and the theoretical underpinnings of ECT. The interview guide is provided in Appendix B. The interview questions were designed to gain insight regarding workplace mattering and aspects of the work environment that support or inhibit their sense of mattering.

Data Collection

Aim 1

Following IRB approved study measures, participants were recruited virtually for the quantitative phase through study advertisements and invitations posted online. Quantitative data, including the WMS, HECS, demographic, and workplace surveys, were collected using a mobile friendly Qualtrics survey accessible via weblink or QR code. At the end of the surveys, participants were asked to provide their email address and/or phone number for contact follow-up if they were interested in participating further through in an individual interview.

Aim 2

Participants who elected to participate in the qualitative phase of the study were contacted by the primary researcher to schedule one-on-one interviews and were compensated with a gift card after completing both phases of data collection. The semi-structured interviews were conducted virtually through the Zoom® platform, and audio recordings were transcribed verbatim using Otter.ai® technology by the primary researcher to ensure full immersion with the data. Field notes were written during and immediately after interviews in order to capture contextual details related to the interview as well as the non-verbal messages and reactions of the nurses.

Data Analysis

Aim 1

Quantitative data were analyzed using STATA®. Descriptive statistics of the WMS and HECS scales, nurse demographics, and workplace characteristics were reported with totals, means, standard deviations, and percentiles. Associations between nurse mattering, the hospital ethical climate, background demographics, and workplace characteristics were analyzed with inferential statistics. Correlations between WMS and HECS were examined as well as mean score differences of the WMS and HECS scores based on various workplace characteristics. Significance levels were set at $\alpha = 0.05$ with a critical value of ± 1.96 (two-tailed test).

Aim 2

Interviews were transcribed and uploaded to NVivo® software. Initial coding began through line-by-line analysis or open coding (Emmerson et al., 1995). For this study, the following definition of a code were utilized: a “a word or short phrase that captures and signals what is going on in a piece of data in a way that links it to some more general analytic issue”

(Emerson et al., 1995, p. 146). As new codes were created from each subsequent interview, previous transcripts were recoded accordingly. After all of the transcripts were individually coded, the primary researcher went back and conducted focused coding in order to make comparisons and contrasts across the interviews (Emerson et al., 1995). Memos were written throughout the coding process and include insights by the primary researcher as they engaged with the data, reflected on the research questions, and made decisions regarding code choices and operational definitions, emerging themes, ties to existing theoretical framework, and possible personal or ethical dilemmas with the data (Saldaña, 2014). Data analysis then broadened to look across the transcripts for themes, which were captured responses relevant to the research questions (Braun & Clarke, 2006). Thematic analysis aggregated the experiences of many to find salient themes of mattering as a nurse that resonate with nurses. Special attention to context ensured that the codes and themes were not separated from the transcribed narratives (Milne & Oberle, 2005).

Context of the data was maintained through the researcher's fieldnotes and memos that connected the narratives, codes, and themes that the notes referenced. To ensure validity of the analysis, other researchers were asked to code a selection of transcripts, and meetings were conducted between the primary investigator and other researchers to discuss the salience of codes and themes and resolve any disagreements on code selections. The primary researcher and other assisting researchers collaboratively developed a codebook to ensure clarity of code selections, descriptions, and definitions.

Integration of findings

The primary researcher sought to explain and enhance the quantitative findings of the WMS and HECS scores with the findings of the qualitative interviews. The stories and examples

of these specific experiences of mattering and perceptions of the ethical climate of the hospital enabled a description of mattering as a nurse and how this perception was influenced by the health care work environment.

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Appendix A: Qualtrics survey

Screening questions

Please select one of the following:

- I am a registered nurse currently licensed IN the United States.
- I am a registered nurse currently licensed OUTSIDE of the United States.
- I am NOT a registered nurse licensed in the United States.

Please enter the state where you are licensed as a registered nurse:

Please select the type of institution where you primarily work as a registered nurse:

- Hospital (inpatient, tertiary care, academic medical center, inpatient psychiatric care unit, etc.)
- Outpatient facility (ambulatory care, outpatient psychiatric care unit, long-term care, rehabilitation center, medical office, health clinic, home health agency, etc.)
- Other facility (public health clinic, health department, school system, community center, etc.) Virtual (insurance, telehealth, etc.)
- Higher education (nursing instructor, faculty, administration, etc.)
- Other (please enter below)

Do you work on an acute or critical care unit within a hospital?

- Yes- I work on an acute care unit
- Yes- I work on a critical care unit
- Yes- I work on BOTH acute and critical care units
- No- I do not work on an acute OR critical care unit I do not provide direct patient care

Informed Consent

Study Title: Investigating the concept of mattering as a nurse within the context of the health care work environment

Protocol #: 5836

Please read this consent agreement carefully before you decide to participate in the study.

Consent Form Key Information:

- Complete a 15-20 minute survey regarding how you matter as a nurse in your health care work environment
- Optional: Zoom interview to explore your experiences of mattering in the context of your

healthcare environment

- No information will be collected that connects your identity to your responses

Purpose of the research study: The purpose of the study is to explore mattering as a nurse within the health care work environment and identify aspects of the work environment such as the hospital ethical climate that play a role in how nurses perceive they matter.

What you will do in the study: You will answer a series of questions about your work as a registered nurse and the work environment where you are primarily employed as a registered nurse. You may skip a question any time it makes you uncomfortable. You may stop the survey at any time. If you choose, you may participate in an interview during which we will ask you to provide additional information about your experience of mattering at work.

Time required: The survey will require about 15-20 minutes of your time. The optional interview will take approximately 30-60 minutes of your time.

Risks: There is a small risk of a breach of privacy and/or confidentiality that may occur. Great effort will be taken to protect participants from loss of confidentiality and/or privacy. All participant data will be stored in high security folders only available to the primary investigator and her faculty sponsor.

Benefits: There are no direct benefits to you for participating in this research study. The study may help us understand how nurses feel that they matter at work and what parts of the health care work environment impact their feelings of mattering.

Confidentiality: The information that you give in the study will be anonymous. Your name and other information that could be used to identify you will not be linked to your data.

Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty. If you wish to withdraw from the study, you can exit the survey at any time and your responses will not be collected. During the interview, if you wish to withdraw, the interviewer will delete your data. There is no penalty for withdrawing.

Because the survey data are not connected to your identity, you cannot withdraw your survey after submitting.

How to withdraw from the study: To withdraw from the study, you may exit the survey at any time and your responses will not be collected. During the interview, please let the interviewer know you wish not to continue, and the interviewer will delete your data.

Payment: You will receive no payment for participating in the Qualtrics survey. However, you may select the option to be entered into a raffle for a \$10 gift card. For your participation in the interview phase of the study, you will receive a \$20 gift card, depending on funding.

Using data beyond this study: The data you provide in this study will be retained in a secure manner by the researcher for 5 years and then destroyed.

If you have questions about the study, contact:

Katy Hall, MSN, RN School of Nursing
225 Jeanette Lancaster Way
University of Virginia, Charlottesville, VA 22903. Telephone: 304-692-4163
kmh5ht@virginia.edu

Beth Epstein, PhD, RN, HEC-C, FAAN School of Nursing
225 Jeanette Lancaster Way
University of Virginia, Charlottesville, VA 22903. Telephone: 434-242-5927
meg4u@virginia.edu

To obtain more information about the study, ask questions about the research procedures, express concerns about your participation, or report illness, injury or other problems, please contact:

Tonya R. Moon, Ph.D.
Chair, Institutional Review Board for the Social and Behavioral Sciences One Morton Dr Suite 400
University of Virginia, P.O. Box 800392 Charlottesville, VA 22908-0392
Telephone: (434) 924-5999 Email: irbsbshelp@virginia.edu
Website: <https://research.virginia.edu/irb-sbs>
Website for Research Participants: <https://research.virginia.edu/research-participants> UVA IRB-SBS # 5836

You may print a copy of this consent for your records.

Electronic Signature Agreement- Please indicate your agreement with the following statement:

- I agree to provide an electronic signature to document my consent.
- I DO NOT agree to provide an electronic signature to document my consent

Study Agreement- Please select one of the following:

- I agree to participate in the research study described above
- I DO NOT agree to participate in the research study described above

Nurse demographics

What is your age?

- < 25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56-65 years old
- >65 years old

What gender do you identify with?

- Male
- Female
- Non-binary
- Prefer not to say

Are you of Hispanic, Latino, or of Spanish origin?

- Yes
- No
- Prefer not to say

How would you describe yourself? (Select all that apply)

American Indian or Alaska Native

- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White
- Other (please specify)
- Prefer not to say

How many years have you practiced as a registered nurse?

- 0-2 years
- 3-7 years
- 8-12 years
- 13-19 years
- 20-29 years
- 30+ years

Which type of nursing degree qualified you for your first U.S. RN license?

- Diploma
- Associate
- Bachelor's
- Master's
- Doctorate (DNP)
- Doctorate (PhD)
- Other (please enter)

What is the highest nursing degree that you currently hold?

- Diploma
- Associate
- Bachelor's
- Master's
- Doctorate (DNP)
- Doctorate (PhD)
- Other (please enter)

Are you currently enrolled in a formal education program leading to an academic degree or certificate?

- Yes (please enter the degree or certification)
- No

Are you currently certified as a specialty care registered nurse (e.g. Certified Neuroscience Registered Nurse, Orthopedics Certified Nurse, Certified Wound Care Nurse, etc.)

- Yes (please enter the certification type)
- No

Hospital characteristics

Which U.S. state or territory do you primarily work as a registered nurse?

Please select the type of hospital where you are primarily employed:

- Academic medical center/ university hospital/ teaching hospital
- Community hospital
- State or district hospital
- Specialty hospital (research hospital, women's and children's hospital, oncology hospital,

- etc.) Federal hospital (Veterans Affairs, Native American Health Center
- Other (please specify)

How many hours per week do you typically work in an acute or critical care unit?

- 1-20 hours per week (0.1-0.5 FTE)
- 21-35 hours per week (0.6-0.8 FTE)
- 36-40 hours per week (0.9-1.0 FTE)
- >40 hours per week

What shift do you primarily work? (Select all that apply)

- Day (7a-3p, 7a-7p, 11a-11p)
- Afternoon/Evening (11a-3p, 11a-7p, 3p-7p)
- Night (7p-7a, 7p-11p, 3p-7a, 3p-3a, 11p-7a)
- Other (please list)

What patient population do you primarily work with? (Select all that apply)

- Neonates or newborns (birth to 1 month)
- Infants (1 month to 1 year)
- Children (1 year to 12 years)
- Adolescents (13 years to 17 years)
- Adults (18 years to 64 years)
- Older adults (65 years and older)

Does your unit provide care to a specialty patient population? (e.g. cardiology, labor and delivery, orthopedics, etc.)

- Yes (please enter)
- No

What is the size of your hospital?

- Small: fewer than 100 beds
- Medium: 100-499 beds
- Large: 500 or more beds

Are you represented by a labor union or collective bargaining unit at your hospital?

- Yes
- No

- I don't know

Does your hospital have Magnet® designation from the ANCC Magnet Recognition Program?

- Yes
- No
- I don't know

Does your hospital offer ethics resources to staff (e.g. ethics consult service, ethical board, ethics resource committee, etc.)

- Yes
- No
- I don't know

Does your hospital have a formal employee recognition or award program (e.g. Daisy Awards, Kudos, Star Awards, etc.)

- Yes
- No
- I don't know

Does your hospital offer a clinical ladder or other types of advancement opportunities for nursing staff?

- Yes
- No
- I don't know

Work Mattering Scale

Jung & Heppner, 2017

Work Mattering Scale: The following questions concern peoples' opinion and feelings about jobs and work experience. These questions refer to your current work (as a registered), not work in general or work you once had. If you currently have more than one job, please choose the one where you work as an acute/critical care nurse in an inpatient hospital and respond to the following questions referring to that work consistently. Do not change the work you chose while you are participating in this survey.

These questions ask about your personal beliefs and feelings, so there is no right or wrong answer.

For each of these questions, please indicate your agreement or disagreement. You should do this by selecting the number that most closely represents your opinion about that question.

	Disagree very much 1	Disagree moderately 2	Disagree slightly 3	Agree slightly 4	Agree moderately 5	Agree very much 6
1. I think that society values the work I do.						
2. My coworkers/ colleagues would be disappointed if they knew that I may leave my job.						
3. I feel my work meets a societal need.						
4. I feel like I matter to my coworkers/ colleagues.						
5. I am connected to society through my work.						
6. My coworkers/ colleagues value my ideas and suggestions.						
7. People say that my work influenced their life.						
8. My boss/supervisor would be disappointed if they knew that I may leave my job.						
9. My work influences people's lives.						
10. My coworkers/ colleagues appreciate my support and help.						

Hospital Ethical Climate Scale

Olson, 1998

Hospital Ethical Climate Scale: Here is a series of statements relating to various practices within your work setting. Please respond in terms of how it is in your current job on your current unit.

As you read and respond to each statement, think of some difficult patient care issues you have faced. For those items that refer to your manager, think of your immediate manager (nurse manager, assistant nurse manager, shift supervisor). It is important that you respond in terms of how it really is on your unit, not how you would prefer it to be. It is essential to answer every item.

There are no right or wrong answers, so please respond honestly. Remember, all your responses will remain anonymous. Please read each of the following statements. Then, select one of the numbers on each line to indicate your response.

	Almost never true	Seldom true	Sometimes true	Often true	Almost always true
	1	2	3	4	5
1. My peers listen to my concerns about patient care					
2. Patients know what to expect from their care.					
3. When I'm unable to decide what's right or wrong in a patient care situation, my manager helps me.					
4. Hospital policies help me with difficult patient care issues/problems.					
5. Nurses and physicians trust one another.					
6. Nurses have access to the information necessary to solve a patient care issue/problem.					
7. My manager supports me in my decisions about patient care.					
8. A clear sense of the hospital's mission is shared with nurses.					
9. Physicians ask nurses for their opinions about treatment decisions.					
10. My peers help me with difficult patient issues/problems					
11. Nurses use the information					

necessary to solve a patient care issue/problem.					
12. My manager listens to me talk about patient care issues/problems.					
13. The feelings and values of all parties involved in a patient care issue/problem are taken into account when choosing a course of actions.					
14. I participate in treatment decisions for my patients.					
15. My manager is someone I can trust.					
16. Conflict is openly dealt with, not avoided.					
17. Nurses and physicians here respect each others' opinions, even when they disagree about what is best for patients.					
18. I work with competent colleagues.					
19. The patient's wishes are respected.					
20. When my peers are unable to decide what's right or wrong in a particulate patient care situation, I have observed that my manager helps them.					
21. There is a sense of questioning, learning, and seeking creative responses to patient care problems.					
22. Nurses and physicians respect one another.					
23. Safe patient care is given on my unit.					
24. My manager is someone I respect.					
25. I am able to practice nursing on my unit as I believe it should be practiced.					
26. Nurses are supported and respected in this hospital.					

Request for interview

We would like to hear more from you about your experiences as a registered nurse. Please indicate if you are willing to be contacted by the primary study investigator to schedule a one-on-one Zoom interview.

- Yes, I am willing to participate further in a one-on-one interview
- No, I do not wish to participate any further.

Please enter the following information so that the primary study investigator can contact you to schedule an interview:

- Full name
- Email address
- Phone number

Thank you for entering your information. You will be contacted by Katy Hall, MSN, RN at kmh5ht@virginia.edu if you are selected to complete an individual interview via Zoom.

Finish survey

Raffle

Thank you for taking the time to complete this survey. As an expression of our thanks, we would like to enter you into a raffle to win one of our \$10 gift cards. Please indicate if you would like to participate in the OPTIONAL gift card raffle:

- Yes, I am willing to be entered into the raffle
- No, complete survey and exit

Please enter the following information in order to be entered into the raffle:

- Full name
- Email address

Thank you for entering your information. You will be notified by Katy Hall, MSN, RN at kmh5ht@virginia.edu if you are selected in the gift card raffle.

Complete survey and exit

Appendix B: Interview guide

1. Please tell me about your role as an inpatient nurse.
 - a. How long have you worked there?
 - b. How long have you been a nurse?
2. How would you describe the work culture on your unit?
3. Tell me about the teams that you work with every day.
4. What kind of resources or support do you have at work?
5. Tell me about a time when you felt like you mattered at work.
6. Tell me about a time when you felt like you DID NOT matter at work.
7. Tell me about how ethical dilemmas are dealt with on your unit.
 - a. Do you feel that your voice is valued when you address ethical concerns?
8. What is working well in your work environment for making the nurses feel they matter?
9. What would you like to see change in your work environment in order to improve how nurses matter?
10. Is there anything else that you would like to share about how nurses matter?

Chapter 2: Manuscript 1

Mattering at work: a scoping review with implications for the health care work environment

ABSTRACT**Background:**

Mattering, the feeling that you make a difference and are significant to others, is endorsed by the U.S. Surgeon General as an essential part of a healthy work environment. The construct of mattering at work is especially relevant for health care workers, and research on mattering within the context of work can provide insight into how the concept can be understood in relation to employees' work experiences.

Objectives:

The purpose of this review was to understand mattering within the context of the health care work environment through the following objectives: 1) systematically search and synthesize the literature on mattering at work, 2) identify key concepts and measurement methods of mattering within the context of work and 3) examine how mattering has been incorporated into work environments.

Methods:

A scoping review was conducted using the following databases: PubMed, ERIC, CINAHL, EMBASE, Business Source Complete, and PsycINFO. Keywords and subject headings related to mattering at work were utilized. Articles were limited to those published in English, but no date limitations were placed.

Results:

A total of 294 journal articles were retrieved. After applying inclusion and exclusion criteria, 32 remained for full analysis. Articles were published between 2001-2023, in 27 journals, and 9 countries. The majority of the study designs were cross-sectional quantitative (n=21) and included a wide range of adult workers as participants. Definitions, measurements,

and characteristics of mattering at work were analyzed. Implications for mattering among health care workers in the health care work environment were discussed.

Conclusion:

Mattering is essential for employee well-being. Health care workers need to perceive they matter through interpersonal, societal, and organizational expressions of mattering. Health care organizations have a responsibility to address the needs of their employees and take steps to enhance perceptions of mattering within the health care work environment.

What is already known on this topic:

Mattering, is essential for well-being. When employees matter at work they report increased productivity, engagement, intention to stay at their jobs, and are less likely to experience burnout and depression.

What this study adds:

Little is known about how health care workers matter at work. This study reviews the literature on what factors of the work environment are related to employees' perceptions of mattering, how mattering has been measured within the workforce population, and how the concept can be contextualized within the health care work environment.

How this study might affect research, practice, or policy:

Future research can build on these findings to design studies that focus on mattering within the health care work environment, develop interventions to address health care worker mattering, and measure outcomes of these interventions in the health care work environment.

INTRODUCTION

In October 2022, Dr. Vivek Murthy, U.S. Surgeon General, released a new framework to address the mental health crisis facing U.S. workplace employees after the COVID-19 pandemic (U.S. Surgeon General, 2022a). One of the five essentials of healthy workplaces was the concept of mattering at work. Mattering, the feeling that you make a difference and are significant to others, is an essential psychological condition for human thriving and flourishing (Prilleltensky, 2020; Rosenberg & McCullough, 1981). Mattering within the context of the work environment includes employee perceptions of feeling valued and adding value (Prilleltensky, 2020).

Burnout, a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1982), is considered a mental health crisis among U.S. health care workers (HCW) (Dzau et al., 2018; Noseworthy, 2018; Jha, 2019). Prior to the COVID-19 pandemic, the prevalence of burnout in U.S. nurses and physicians was 35-54% (NASEM, 2019). Since then, numerous reports have reported that those numbers are significantly increasing (Aiken, 2023; HRSA, 2024; Martin et al., 2023; Ortega et al., 2023; Melnikow et al., 2022). In a recent public health advisory on HCW burnout, the U.S. Surgeon General urged organizations to empower HCW voices in decision-making, address their concerns, commit to safe work environments, and show HCW how much they are valued (U.S. Surgeon General, 2022b).

In the health care work environment, it is important that health care providers perceive they matter, not only to their patients, but also to their peers, colleagues, and the organization itself (Epstein et al., 2020). In non-health care workplaces, the extent to which employees perceived that their organizations valued their contributions strongly predicted their job productivity and well-being and was positively correlated with their intentions to stay (Kurtosis et al., 2017). Preliminary studies investigating mattering among HCW reported that mattering

was significantly associated with a decrease in burnout and turnover (Haizlip et al., 2020; Mohamed et al., 2020). However, there is a paucity of research on mattering within the health care work environment and little is known about how mattering is characterized, measured, or how it can be incorporated into interventions to improve the work experiences of HCW.

Background

The term mattering was first introduced by social psychologists Rosenberg and McCullough in 1981 (Jung, 2015). To matter is to be significant, but mattering is “the reciprocal of significance” (Rosenberg & McCullough, 1981, p. 163). In order for mattering to have an impact, people must understand or perceive that they matter to others (Rosenberg & McCullough, 1981). Perceptions of mattering are conveyed by the feelings that one is the object of another person’s attention, they are important to them, others are dependent on them, their absence would be noted, and that others feel pride in their successes (Rosenberg, 1985; Rosenberg & McCullough, 1981).

Mattering is also characterized as interpersonal or societal mattering. Interpersonal mattering is defined as a person’s perception that they are cared about and significant to a specific group of people (Rosenberg & McCullough, 1981). Societal mattering is when one feels they make a difference on a broader scale and are significant in society (Rosenberg, 1985). Prilleltensky (2020) further developed the concept of mattering through his conceptual framework of mattering as a balance between two key psychological experiences of feeling valued and adding value within the four main domains of life: society, work, interpersonal relationships, and self.

Further research into how mattering at work has been explored and conceptualized is necessary for understanding this specific context of mattering and highlighting its relevance to

the health care work environment. To date, there have not been any literature reviews investigating the concept of mattering at work.

Objectives

The purpose of this systematic scoping review was to better understand mattering within the context of the health care work environment. To that aim, the following objectives were developed: 1) systematically search and synthesize the literature on mattering at work, 2) identify key concepts and measurement methods of mattering within the context of work and 3) examine how mattering has been incorporated into work environments.

METHOD

Scoping review framework

The design of this scoping review was guided by the Johana Briggs Institute evidence synthesis framework for scoping reviews (Aromataris et al., 2024). The following steps of the framework were completed: 1) define and align the objectives, 2) develop and align inclusion criteria with objectives, 3) describe planned approach to evidence searching, 4) search the evidence, 5) select the evidence, 6) extract the evidence, 7) analyze the evidence, 8) present the results, and 9) summarize the results (Peters et al., 2020).

Search strategy

The apriori search strategy was developed by the research team to identify published, empirical studies where mattering at work was explored and measured. The first stage of the search was conducted by the primary author (KH) and a medical reference librarian (AD) in PubMed to identify relevant keywords and medical subject headings (MeSH terms). Publication type and language limitations were placed to screen for journal articles and those printed in English. A sample of titles and abstracts were reviewed, and the search strategy was adjusted.

The second stage involved tailoring the search strategy to each database and reviewing titles and abstracts. Once the search strategy was finalized for each database, the final search was conducted in PubMed, ERIC, CINAHL, EMBASE, Business Source Complete, and PsycINFO (see supplemental data 1 for search strategy). The results were imported into Covidence© software. After confirming a random selection of five studies were relevant through full text review, the two reviewers began the process of independently reviewing and applying inclusion and exclusion criteria to all of the search results through Covidence© (See table 1). The search and subsequent analysis were conducted March-April 2024.

Table 1. Inclusion-exclusion criteria of search results

Inclusion criteria	Exclusion criteria
Peer-reviewed journal	Non-peer reviewed journal, magazine editorial, newsletter, book chapter, or thesis/dissertation
Participants were adults	Participants included children or adolescents
Work/occupational context	Context was not work-related
Data collection variable/topic included mattering	No data was collected and/or mattering was not measured
Printed in English	Non-English language
Any dates	
All countries	

Data extraction and analysis

The following data were extracted from the studies and imported into a Microsoft Excel© spreadsheet: author, year published, country, study aim, study design, population, sample size, measurement instrument, key findings, and implications. Studies were also analyzed individually for how the concept of mattering was defined, measured, and compared with other work experiences and psychological concepts (see supplemental data 1).

RESULTS

Overview

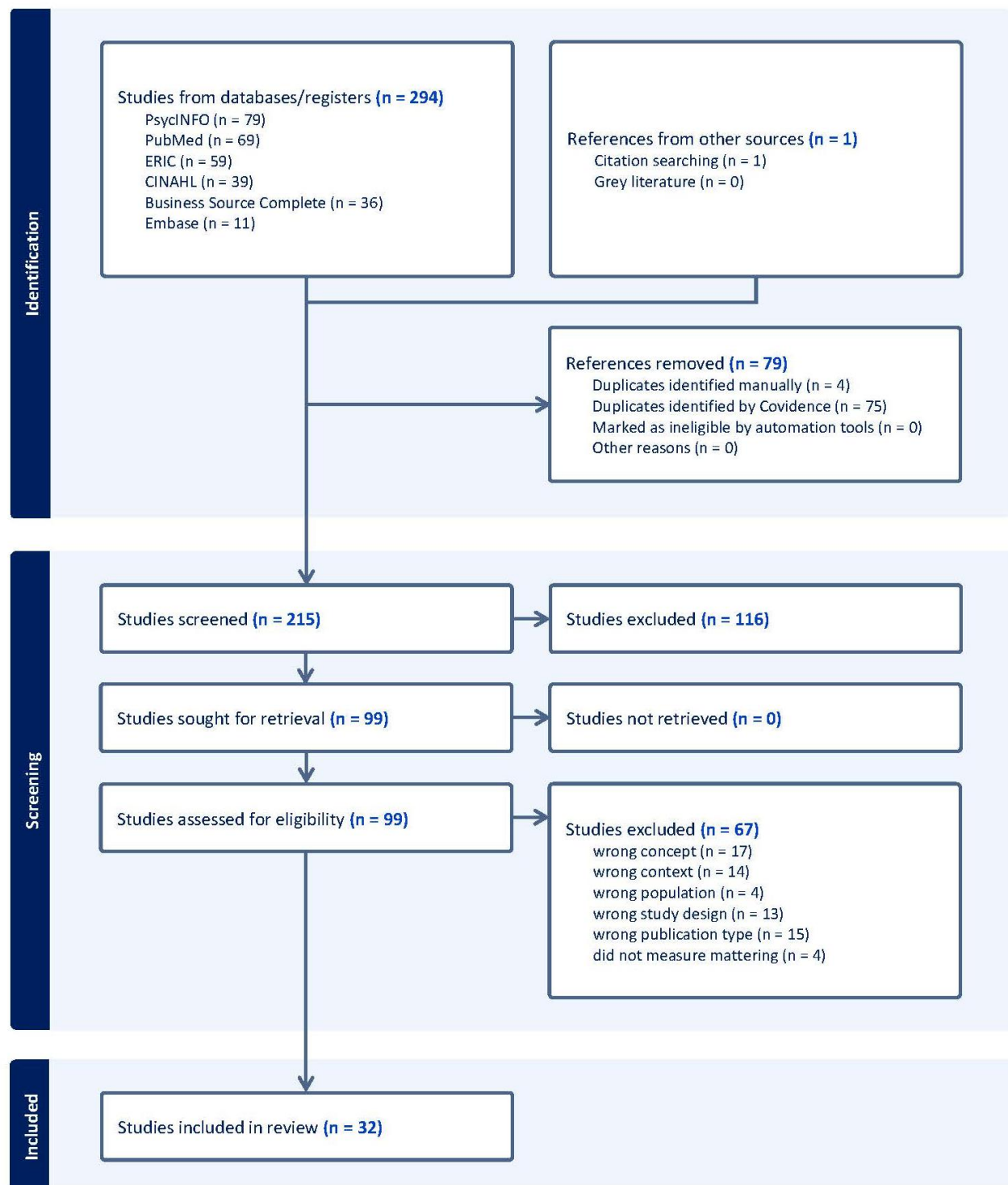
The systematic search of the literature resulted in 294 studies. Duplicates were removed (n=79), and 215 titles and abstracts were reviewed in Covidence® by two independent reviewers. After 116 articles were removed, the full text of 99 articles were reviewed by two independent reviewers resulting in the exclusion of 67 more articles. A hand-search of the articles' references resulted in one additional study. Thirty-two articles met inclusion criteria and were included in the final data analysis (see figure 1).

Study characteristics

Studies were published between the years 2001 through 2023, in twenty-seven different journals. Studies were conducted in nine different countries including Argentina (n=1), Canada (n=1), Egypt (n=1), India (n=1), Italy (n=1), Malaysia (n=1), Netherlands (n=1), Switzerland (n=1), and the United States (n=24). The majority of the study designs were quantitative, cross-sectional (n=23), however there were also quantitative mixed-method (n=1), longitudinal quantitative (n=2), and qualitative interviews (n=6).

A variety of participants provided data regarding experiences of mattering at work including generally employed adults, community psychologists, faculty in higher education, primary and secondary teachers and counselors, medical residents and their spouses, registered nurses, social workers, older workers, retirees, and research administrators. Sample population sizes ranged from 10 to 31 participants in the qualitative interviews while the quantitative survey samples ranged from 82 to 1,345 participants.

Figure 1. PRISMA diagram



Defining mattering

Most of the studies in this review utilized Rosenberg and McCullough's (1981) and Rosenberg (1985) original mattering research to define mattering as the perception of feeling significant by others through attention, importance, dependence, ego-extension, and noted absence. Some of the studies cited authors who expanded on the concept of mattering through later research (See supplemental data 3).

Although his work centered on adolescents' perceptions of mattering to their parents and their friends, Marshall's (2001) conceptualization of mattering as a sense of belonging (relatedness) and meaning in life was included. Elliott and colleagues' (2004) research focused on the two categories of awareness: the cognitive realization of our existence by society, and relationships, interpersonal connections wherein people feel valued, in mattering. Elliott et al. (2004) placed Rosenberg's (1981) mattering tenets within these categories; attention was included in the category of awareness while importance and reliance were listed as types of mattering within relationships.

In their conceptualization of mattering to an organization, Reece and colleagues (2021), drew on philosopher Goldstein's (2015) definition of mattering as achievement in one's actions and recognition of that achievement. O'Brien's (1996) definition of mattering as the result of a person's influence or impact on someone else was also used by Reece and colleagues (2021). Richards and colleagues' (2016) applied Rosenberg and McCullough's (1981) concept of mattering to the specific population of PE teachers within the context of a school system. Their domains of mattering included "teacher matters," teachers perceiving they mattered as individual teachers, and "PE matters," perceptions that the discipline of PE matters (Richards et al., 2016, p. 77).

Measuring mattering

A variety of validated instruments and other types of survey questions were used to measure mattering in the quantitative studies (See Supplemental data 4). The majority of these measurements were based upon Rosenberg and McCullough's (1981) and Rosenberg's (1985) original research. Two of the instruments were developed for the specific populations including PE teachers (Richards et al., 2016) and school counselors (Rayle 2006). Two others were developed for specific contexts such as mattering at work (Jung & Heppner, 2017) and organizational mattering (Reece et al., 2021).

In the qualitative studies, some of the interview guides included questions to encourage discussions of mattering at work while others asked more general questions that did not include prompts for mattering. These studies, however, utilized the lens of mattering to analyze the interview transcripts for themes regarding mattering (See supplemental data 3).

Characteristics of mattering at work

Work is an important source of meaning and dignity in most adults' lives (Jung & Heppner, 2017). Adults who were employed full-time reported significantly higher levels of mattering than those who were employed part-time or unemployed (Scarpa et al., 2021). Retired individuals were also found to have higher levels of mattering than unemployed individuals (Scarpa et al., 2021). The studies in this review provided a detailed view of how mattering within the context of work was characterized.

Work role and status

When participants believed that their work role was important, they in turn felt that they mattered (Schieman & Taylor, 2001). Social workers employed in nursing homes perceived their role as advocates for patients to be important, and the responsibility of their roles reinforced their

own sense of mattering (Lee et al., 2016). Further evidence demonstrated that those in job roles which held greater responsibility, supervision, autonomy, and complexity, had higher perceptions of mattering (Reece et al., 2021; Scarpa et al., 2021; Schieman & Taylor, 2001). There were also significant differences in mattering levels among adults based on income and education level (Scarpa et al., 2022; Schieman & Taylor, 2001). As income levels increased, so did the mattering domains of feeling valued as a person, feeling valued through interpersonal relationships, and occupational mattering (Scarpa et al., 2021). Individuals with higher levels of education, certifications, or specialization also reported higher levels of overall mattering compared to their coworkers without these advancements (Scarpa et al., 2021; Wilson et al., 2020, 2021). Work roles comprised a type of social organization or status that contributed to a sense of mattering (Schieman & Taylor, 2001).

Workers in underappreciated fields struggled to perceive how their roles mattered (Richards et al., 2018). Physical education (PE) teachers frequently reported that their discipline was viewed as a commodity and expressed feelings of isolation and marginalization (Gaudreault et al., 2017, 2018; Richards et al., 2018; Washburn et al., 2020). PE teachers' perceptions of how the discipline of PE mattered was highly correlated with their perceptions of self-worth and how they mattered as teachers (Richards et al., 2019; Washburn et al., 2020). Likewise, higher perceptions of mattering were also negatively correlated with isolation and marginalization among teachers, higher education faculty, and university research administrators (Gaudreault et al., 2017, 2023). It was important for these employees to have advocates for the value of their field in addition to a community of peers, key stakeholders, and organization who provided support (Gaudreault et al., 2017, 2018, 2023).

Social nature of work

Work was viewed as a highly social endeavor and the interpersonal relationships at work greatly influenced how employees perceived they were important to others (Jung & Heppner, 2017; Schieman & Taylor, 2001). Interpersonal mattering was associated with higher levels of mattering among older adults and retired individuals compared to younger working adults (Scarpa et al., 2021). PE teachers reported feeling increased mattering when they built relationships with their colleagues, students, and administrators (Richards et al., 2018). As a result, researchers encouraged teachers to continue to seek out relationships with their peers in order to build social strategies for redefining their roles and validating their importance (Richards et al., 2018). Researchers found that community psychologists knew their work was important and added value to others, but they also they were valued by others and connected to a community (Shaw et al., 2023).

Support at work

Social support at work was characterized by assistance, advice, and camaraderie with team members or peers (Froidevaux et al., 2016). When employees believed that their peers and supervisors provided support, they also reported a greater sense of mattering to others (Froidevaux et al., 2016; Haizlip et al., 2020). Nurses' perceived social support from peers was more highly correlated with mattering than support from supervisors (Haizlip et al., 2020). Soral (2022) found that employees who worked under difficult supervisors with negative personality traits needed to feel socially connected to others in order to maintain mattering. Zeijen et al. (2023) reported that their findings supported the social exchange theory that when an individual perceives social support as positive, they are motivated to reciprocate. They found that

employees who provided supportive relationships to coworkers during the workday continued to experience feelings of increased mattering and positive emotions at home (Zeijen et al., 2023).

Support from the organization was also necessary for employee mattering. Perceived organizational support was originally defined by Eisenberger and Huntington (1986) as an employee's belief that the organization values their work contributions and cares about their well-being. Richards et al. (2020) found that among adapted PE teachers, perceived organizational support had a medium effect on how teachers perceived they mattered. Richards et al. (2022b) reported that marginalization, isolation, and role stress were negatively associated with perceived mattering and perceived organizational support among higher education faculty. Contrary to these results, Wilson (2021) found adapted PE teachers with and without certifications had significantly different mattering levels but no differences in perceived organizational support.

Societal impact

Not only did employees need to matter to others and the organization, but they needed to feel that their work was contributing to society (Jung & Heppner, 2017). Perceptions of mattering were affected when teachers felt they were unable to have the level of social impact in their work that they anticipated when they entered the field (Barrenechea, 2022). The meaning that nurses gained when they helped others was positively associated with increased mattering (Haizlip et al., 2020).

Focus on actions

Concentrating exclusively on the work environment, Reece et al. (2021) challenged the previous prioritization of interpersonal and societal mattering and focused instead on the objective consequences of individual's actions at work. They argued that the most relevant sense

of mattering within an organization was the impact of an individual's actions on the environment and the recognition of these actions by others (Reece et al., 2021). Their results indicated that action-oriented mattering was correlated with self-efficacy, job satisfaction, and meaning (Reece et al., 2021).

Employee well-being

Mattering was important for psychosocial well-being (Richards et al., 2018). Connolly & Myers (2003) argued that job satisfaction was a social responsibility of organizations due to its relationship with employee well-being. Connolly and Myers (2003), Jung and Heppner (2017), Richards et al. (2019), and Rayle (2006) all reported positive, significant relationships between job satisfaction and mattering. While researchers were unable to demonstrate that mattering was predictive of job satisfaction (Connolly & Myers, 2003), some did find a large, indirect effect of mattering on job satisfaction (Richards et al., 2019).

Burnout syndrome was a serious threat to workers' well-being and leads to emotional exhaustion and withdrawal due to chronic stress (Richards et al., 2020). Haizlip et al. (2020) and Mohamed et al. (2022) both reported strong negative correlations between mattering and burnout among nurses. In their attempt to address burnout among teachers during COVID-19, Baguri (2022) focused on the effects of dispositional hope, mattering, and crisis self-efficacy on teacher resilience. They found that the effect of mattering on resilience was significant (Baguri et al., 2022). In both of their studies, Melnyk and colleagues (2023a; 2023b) reported that mattering was associated with less depression, lower stress, and less burnout. Richards and colleagues (2020) found that perceived organizational support negatively influenced emotional exhaustion both directly and indirectly through perceived mattering and resilience.

Retention

Only one study assessed the relationship of mattering on employee retention. Reece et al. (2021) reported that both recognition and achievement, the subdomains of organizational mattering, were predictors of retention. Other studies however, posited that the positive outcomes of enhanced mattering may impact retention in the workplace (Gaudreault et al., 2023; Haizlip et al., 2020; Jung & Heppner, 2017; Melnyk et al., 2023a; Melnyk et al., 2023b; Richards et al., 2019).

DISCUSSION**Principal findings**

This scoping review provided a detailed look at the concept of mattering within the context of the work environment. Overall, mattering was consistently defined in each of the studies. Analysis across studies provided nuanced descriptions of the concept within different contexts and among different populations. While there were several different validated instruments for measuring mattering, there were no contradictions between the scales or studies that used them, instead each study uncovered another aspect of mattering at work or confirmed past research.

Mattering at work is shaped by many factors, some intrinsic to employees such as their education level, gender, or race, others are extrinsic influences from their job role, colleagues, administration, and the organization itself. Employees feel they matter according to their own perceptions of meaning and the responsibility of their roles. Workplace characteristics that can enhance employee perceptions of mattering are respect, responsibility, autonomy, adequate income, advocacy from key stakeholders, and support from the organization. Research on healthy work environments within health care supports these findings (de Vries et al., 2023; Wei

et al.2018). When these key elements are missing within the work environment, HCW, are more likely to experience burnout (Gomez et al., 2020).

Employees also interpret support from other colleagues, supervisors, and the organization as evidence that they matter at work. Support can come in many forms such as psychological and emotional support from caring colleagues and supervisors. Physical supports like safe working conditions and adequate resources also demonstrate an employee's value to the organization (Flett & Zangeneh, 2020). Perceived organizational support increases when employees are given organizational rights, allowed to make procedural and policy decisions, and provided transparent due process (Kurtessis et al., 2017). The perceptions and experiences of employees should be considered with the same amount of care and attention as the objectives of an organization (Ballard & Grawitch, 2016). When employees matter to an organization and feel valued at work, they are more likely to be engaged and happy with their work environment (Ballard & Grawitch, 2016).

Individual relationships and social interactions at work also impact how employees matter. Blustein's (2011) relational theory of work posits relationships are what shape decisions, experiences, and interactions at work. Employees feel significant to their colleagues when their opinions are valued, they are considered a trusted resource, and they have a strong rapport and camaraderie with their team. Peer support and interprofessional collaboration among HCW are essential for navigating work stressors and mitigating burnout (Barghouth et al., 2023; Tolins et al., 2023; Velando-Soriano et al., 2020). Negative workplace behaviors such as incivility and horizontal violence can severely damage working relationships and individual well-being among HCW (Bambi et al., 2018; Kavaklı & Yildirim, 2022).

Mattering is an essential part of a healthy work environment (U.S. Surgeon General, 2022b) and can be incorporated into organizational health and wellness programs (Melnik et al., 2023a). Efforts to develop healthy work environments must also include work within the climate of the organization to decrease the stigma of mental health (Melnik et al., 2023b). Working for an employer that values emotional and psychological well-being was listed as a priority for 92% of workers in the American Psychological Association's (2023) annual Work in America Survey. Employers should provide support, access to resources, and enable cultures of wellness where all flourish (Melnik et al., 2023b). A climate of psychological safety enables employees to feel comfortable expressing themselves and safe raising difficult issues (American Association of Psychology, 2024). Employees who reported working within a work climate of psychological safety were much more likely to also feel they matter to their employer and that their overall mental health was excellent or good (American Psychological Association, 2023).

Limitations

While every attempt was made to develop a thorough search strategy, articles may have been missed. Furthermore, the study team limited results to those published in English, therefore any studies printed in other languages were not captured. The concept of mattering is well-defined in the literature and the research team felt confident only utilizing the key word "mattering" in the search terms. However, broadening the search to include related terms may provide additional information on other meaningful work experiences.

Future research

To date there have been no studies examining the effects of interventions on mattering in any context (Flett, 2018). Further research is needed to specifically examine mattering within health care work environment to provide insight into what interventions may be effective for

enhancing mattering among HCW. In this review, no studies explored the effects of racism, ableism, or other types of discrimination within the work environment on perceptions of mattering. Understanding how these factors influence mattering may be beneficial for improving work environments and supporting equity and inclusion in the workplace. Health care organizations and leaders should follow the U.S. Surgeon General's framework for healthy work essentials and incorporate mattering into the work environment to mitigate the effects of stress and burnout.

Conclusion

The feeling that one matters at work is essential for employee well-being. Through mattering employees are connected to the meaning of work, relationships with others, and their impact in society. While the presence of mattering leads to enhanced engagement, belonging, resilience, and job satisfaction, the absence of mattering can lead to burnout, turnover, and depression. Mattering is not only relevant to HCW, but it is an essential part of a healthy work environment. HCW need to perceive they matter through interpersonal, societal, and organizational expressions of mattering. Health care organizations have a responsibility to address the well-being of their employees and take steps to enhance perceptions of mattering within the health care work environment.

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Supplemental data 1: Search query by database

Database	Query	Results
PubMed	((("mattering"[Title/Abstract]) AND ((work*[Title/Abstract] OR occupation*[Title/Abstract] OR employment[Title/Abstract] OR job[Title/Abstract] OR career*[Title/Abstract]))) AND (english[Filter])) OR ("mattering"[All Fields] AND ("self concept"[MeSH Terms] OR "psychology, industrial"[MeSH Terms] OR "work engagement"[MeSH Terms]))	69
EMBASE	((mattering:ab,ti AND (work*:ab,ti OR occupation:ab,ti OR employment:ab,ti OR job:ab,ti OR career:ab,ti)) OR (('quality of working life'/exp OR 'job satisfaction'/exp) AND 'mattering')) AND [embase]/lim NOT ([embase]/lim AND [medline]/lim)	11
CINAHL	S1: AB mattering AND AB (work* OR occupation OR employment OR job OR career*) S2: (MH "Quality of WorkingLife") OR (MH "JobSatisfaction+") S3: Mattering S4: S2 AND S3 S5: S1 OR S4	39
PsychInfo	S4: AB mattering AND AB (work* OR occupation OR employment OR job OR career) <ul style="list-style-type: none"> With limiters <ul style="list-style-type: none"> English language Journal articles 76 articles S5: "mattering" AND DE "Job Satisfaction" <ul style="list-style-type: none"> 5 articles S6: We tried to use S4 OR S5 but Ebsco host would only do "AND", so we combined these manually and took out duplicates	79
ERIC	S1: AB (work or occupation or employment or job or career) AND AB mattering S2: DE "Job Satisfaction" OR DE "Quality of Working Life" S3: mattering	59

	S4: S2 AND S3 S5: S1 or S4	
Business Source Complete	S1: AB (work* OR occupation OR employment OR job OR career) AND AB mattering S2: ((DE “JOB satisfaction”) OR (DE “QUALITY of work life”)) AND mattering S3: S1 OR S2	36

Supplemental data 2: Article analysis

Authors	Population	Methodology	Mattering instrument and internal consistency	Mattering findings	Implications for mattering
Baguri et al. (2022)	Secondary teachers in Malaysia (n=248)	cross-sectional, quantitative survey	Ways of Mattering Questionnaire (Amundson, 1993) ($\alpha=0.92$)	Mattering was positively correlated with teacher resilience, hope, self-esteem, and crisis self-efficacy.	Improving levels of mattering can raise teachers' resilience.
Barrenechea (2022)	Elementary teachers in Argentina (n=21)	qualitative interviews	none used in interview guide	Teachers felt they deserved respect but reported that they had lost feelings of being valued and adding value. Low levels of mattering impacted their overall well-being.	Developing a sense of a supportive community may increase teachers' perceptions of mattering and improve their collective empowerment.
Conolly & Myers (2003)	Employed adults in U.S. (n=82)	cross-sectional, quantitative survey	General Mattering Scale (Marcus, 1991) ($\alpha=.90$)	Mattering was positively related to job satisfaction and wellness. However, mattering only explained a small proportion of the variance in job satisfaction.	Interventions that combine wellness and mattering may improve job satisfaction.
Di Fabio (2022)	Employed adults in Italy (n=246)	cross-sectional, quantitative survey	General Mattering Scale (Marcus & Rosenberg, 1987) ($\alpha=.80$)	The structure of the GMS instrument was confirmed through a good Cronbach alpha and item-total correlations.	The GMS is a valid and reliable scale to detect mattering in Italian workers.
Froidevaux et al. (2016)	Older workers (>55) and retirees in Switzerland (n=347)	longitudinal quantitative surveys	General Mattering Scale (Rosenberg & McCullough, 1981; Marcus, 1991) ($\alpha=.85$)	Study 1 found that mattering mediated the effects of social support at work on life satisfaction but not retirement planning. Study 2 found that mattering mediated the effects of general social support on positive affect but not life satisfaction.	Work is a basis for mattering and retirees may need strategies to find other sources of mattering within the community, relationships, and themselves.

				However, mattering did not mediate effects of caregiving activities.	
Gaudreault et al. (2017)	Physical Education (PE) teachers in U.S. (n=270)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha=.87$)	Marginalization was negatively correlated with how PE teachers perceived they mattered and perceptions that the PE profession mattered. There was also a moderate, negative relationship between isolation and how teachers mattered.	Mattering is related to belonging, relevance, job satisfaction, and well-being for PE-teachers. Educating key stakeholders on the purpose of PE may increase perceived mattering and decrease feelings of marginalization and isolation among PE teachers.
Gaudreault et al. (2018)	Physical Education (PE) teachers in U.S. (surveys, n=105) (interviews, n=23)	cross-sectional, mixed methods	PMQ-PE (Richards, 2016) ($\alpha=.80$)	PE teachers with graduate degrees and those working in secondary education schools had higher perceptions of mattering than PE teachers with bachelor's degrees or taught in elementary education.	Advocating for and communicating the value of PE can improve PE teachers' perceptions of mattering and decrease feelings of marginality.
Gaudreault et al. (2023)	Research administrators (RAs) in U.S. (n=286)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha=.86$)	Perceived mattering of RAs was significantly and inversely correlated with perceived marginality and isolation. Perceived mattering increased with years in the profession and with increased salary levels.	RAs are important facilitators of universities' research goals and their perceptions of mattering should be supported in order to retain them in the field.

Haizlip et al. (2020)	registered nurses in U.S. (n=324)	cross-sectional, quantitative survey	Work Mattering Scale (WMS) (Jung & Heppner, 2017) ($\alpha=.89$)	Higher levels of mattering at work were associated with lower burnout and higher engagement. Mattering was correlated with perceived social support from nurses' organization, supervisors, and peers.	Enhancing nurses' perceptions of mattering may lead to higher levels of resilience and engagement at work.
Jung & Heppner (2017)	Employed adults in U.S. (n=550)	cross-sectional, quantitative survey	Work Mattering Scale (WMS) (Jung & Heppner, 2017) ($\alpha=.88$ and .91)	Results provided support for the reliability and validity of the WMS	The WMS is a useful tool for measuring mattering and will assist in studying the social, cultural, and relational contexts of the work experience.
Lee et al. (2016)	nursing home social workers in U.S. (n=10)	qualitative interviews	none used in interview guide	Social workers felt they mattered due to the importance of their role and their place as team members. Making positive changes in the work environment also enhanced social workers' feelings of mattering.	Nursing home administrators should support organizational cultures that value all employees and their contributions.
Melnyk et al. (2023a)	University nursing and health sciences faculty, staff, students in U.S. (n=1345)	cross-sectional, quantitative survey	Single question: "I matter to my college." Options: Not at all, a little, somewhat, moderately so, and very much so	Higher perceptions of mattering to the college were associated with lower depression, less anxiety, lower stress, less burnout, and increased perceptions of college wellness culture.	Universities must provide supportive wellness cultures for faculty, staff, and students where all members feel they matter to the institution.

Melnyk et al. (2023b)	Doctorally prepared nursing faculty in U.S. (n=224)	cross-sectional, quantitative survey	Single question: "I matter to my college." Options: Not at all, a little, somewhat, moderately so, and very much so	Higher perceptions of mattering and workplace culture were associated with less depression, anxiety, and burnout.	Doctorally prepared nursing faculty who have higher perceptions of mattering and wellness cultures at their universities experience less burnout, depression, and anxiety.
Mohamed et al. (2022)	Nurses in Egypt (n=289)	cross-sectional, quantitative survey	Work Mattering Scale (Jung & Heppner, 2017) ($\alpha = .80$)	Mattering was positively correlated with engagement and negatively correlated with burnout. For every one-point mean increase in mattering scores there was a 20% decrease in burnout level.	Enhancing nurses' perceptions of mattering may also increase work engagement and decrease levels of burnout.
Powers et al. (2004)	medical residents and their spouses in U.S. (n=83)	cross-sectional, quantitative survey	General Mattering Scale (GMS) (Marcus, 1991) ($\alpha =$ not reported)	There were no differences in mattering levels between medical residents and their spouses. However, non-medical spouses had significantly higher mattering scores than other married adults. Non-medical spouses scored lower on work wellness and realistic expectations than other married adults.	Medical residents and their spouses have high perceptions of mattering but may also have perfectionist tendencies as indicated by their unrealistic expectations and lower work wellness.
Rayle (2006)	elementary, middle, and high school counselors in U.S. (n=388)	cross-sectional, quantitative survey	School Counselor Mattering Survey (SCMS) (Rayle, 2006) ($\alpha = .91$)	Mattering was positively correlated with job satisfaction and negatively correlated with job stress. Mattering and job-related stress were good predictors of job satisfaction.	When school counselors, who are important facilitators of students' identity development, have higher perceptions of mattering and job satisfaction, they will be more effective in their roles.

Reece et al. (2021)	Adults in U.S. (n=196)	cross-sectional, quantitative survey	Organizational Matter Scale (OMS) (Reece, 2021) ($\alpha=.90-.92$)	Construct validity, exploratory factor analysis, and confirmatory factor analysis demonstrated the OMS was a valid instrument measuring perceptions of mattering to the organization. OMS predicted job satisfaction, leadership roles, and retention.	Action-oriented mattering due to achievement and recognition predicts how employees matter to their organization.
Richards et al. (2018)	PE teachers in U.S. (n=30)	qualitative interviews	Interview questions focused on interactions in the school community that caused them to feel that they as a teacher and the discipline of PE mattered or was marginalized.	PE teachers perceive they matter at work when they have support from key stakeholders, their teaching practices are validated, and the relevance of PE is advocated. However, they experience feelings of marginality when PE is viewed as a service to other teachers.	PE teachers' perceptions of mattering should be supported in order to promote resilience and enable them to achieve personal accomplishment from their work.
Richards et al. (2019)	PE teachers in U.S. (n=500)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha=$ not reported)	Perceptions that the subject of PE mattered positively influenced perceptions of mattering as a PE teacher and were negatively associated with role conflict, role overload, and role ambiguity. Perceptions that they mattered as teachers was negatively associated with emotional exhaustion.	Enhancing perceptions of PE mattering as a subject and mattering as a PE teacher can help reduce teachers' perceptions of emotional exhaustion and increase job satisfaction.
Richards et al. (2020)	Adapted PE teachers in U.S. (n=237)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha= 0.79-0.87$)	Perceived mattering as a teacher was directly associated with job satisfaction. Perceived organizational support was	It is important to develop workplace environments where APE teachers feel support from the

				directly and indirectly mediated by mattering and resilience.	organization, perceive they matter, and develop resiliency.
Richards et al. (2022a)	Physical education faculty in higher-ed in U.S. (n=286)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha = 0.90-0.91$)	Perceptions that PE teacher education (the profession) matters and that PE faculty matter was associated with perceived organizational support and negatively associated with marginalization, isolation, role stress, and emotional exhaustion. There were differences among faculty working at masters and doctoral level institutions as well as between male and female faculty work perceptions.	Understanding physical education faculty's work experiences can help promote faculty socialization experiences, improve doctoral education, and build support programs for faculty.
Richards et al. (2022b)	Physical education faculty in higher-ed in U.S. (n=23)	qualitative interviews	none used in interview guide	Physical education pre-tenured faculty face challenges in teaching, research, and service roles. The sociopolitical environment of higher education can cause PE faculty to feel isolated, marginalized, and challenge their perceptions of how the discipline matters.	Attending to the well-being of PE faculty promotes the future of the PE profession. Doctoral education, research, and practice should seek to support and prepare PE faculty for their roles.
Richards et al. (2022c)	Physical education faculty in higher-ed in U.S. (n=286)	cross-sectional, quantitative survey	PMQ-PE (Richards, 2016) ($\alpha =$ not reported)	Resilience mediates the relationship between emotional intelligence and perceived mattering. Perceptions that the profession of PE teacher education mattered were	It is important to develop cultures where PE teacher education is valued, faculty are supported, and where they feel that their contributions matter.

				associated with perceptions that teacher educators matter.	
Scarpa et al. (2021)	Adults in U.S. (n=937)	cross-sectional, quantitative survey	Mattering in Domains of Life Scale (MIDLS) (Scarpa et al., 2020) ($\omega = 0.88$)	There were significant differences in overall mattering for income level, employment status, and education level. There were no significant differences in overall mattering for age or gender. There were separate subdomain differences such as retired individuals had higher personal-feeling valued, interpersonal-feeling valued, community-feeling valued than un-employed participants.	There are meaningful differences in daily experiences of mattering that may not be detected without a multidimensional measure. This instrument may enable the development of interventions to improve mattering for adults.
Scarpa et al. (2022)	Adults in U.S. (n=937)	cross-sectional, quantitative survey	Mattering in Domains of Life Scale (MIDLS) (Scarpa et al., 2020) ($\alpha = 0.87$)	MIDLS is a valid instrument for measuring a general sense of mattering in 8 subdomains including: overall mattering, personal mattering—feeling valued, interpersonal mattering—feeling valued, occupational mattering—feeling valued, community mattering—feeling valued, interpersonal mattering—adding value, occupational mattering—adding value, and community mattering—adding value.	Using the MIDLS instrument can help identify ways to increase feeling valued and adding value in domains of life where it is lacking.

Schieman & Taylor (2001)	Adults in Canada (n=987)	qualitative interviews	Structured interview guide with 5 questions about mattering ($\alpha=0.78$)	Working women reported higher levels of mattering than working men. Those in occupations with greater autonomy, complexity, and supervisory roles had higher levels of mattering.	The social roles and interactions at work impact feelings of mattering and significance.
Shaw et al. (2023)	Community psychologists in U.S. (n=31)	qualitative interviews	Interview protocol with 1 question about mattering	In explaining benefits to being the lone CP, participants described how they felt valued, that they mattered, and that the work was stronger because of the unique value orientation they brought to it.	Community psychologists, who are connected to their work and value the work they do. They need to know they matter and are a part of a community in order to continue optimal work experiences.
Soral (2022)	Employed adults in India (n=240)	cross-sectional, quantitative survey	Mattering Index (Elliott, 2004) ($\alpha=0.92$)	Negative personality traits of supervisors had a significant, negative effect on mattering. Mattering had a significant, positive effect on job security and a negative impact on knowledge hiding behavior	While supervisors with negative personality traits may be beneficial to an organization, employees under these supervisors should be supported through enhancing their feelings of mattering.
Washburn (2020)	PE teachers in U.S. (n=472)	cross-sectional, quantitative survey	PMQ-PE (Richards et al., 2016) ($\alpha=.83-.89$)	Perceptions that the subject of PE matters increased perceptions that the teacher mattered. Perceived mattering was also positively associated with psychological needs satisfaction, autonomy, competence, and relatedness satisfaction.	When PE teachers know that their subject matters, they feel they matter. Institutions are encouraged to demonstrate the value the subject of PE as well as PE teachers.

Wilson et al. (2020)	Adapted PE teachers in U.S. (n=653)	cross-sectional, quantitative survey	PMQ-PE (Richards et al., 2016) ($\alpha=.80-.87$)	Adapted physical education (APE) teachers had higher perceptions that their subject mattered at their school than PE teachers. They also had higher perceptions that they mattered as teachers than PE teachers.	Adapted physical education teachers may have higher perceptions of mattering as teachers and that their subject matters due to specialization, certification, and federal support.
Wilson et al. (2021)	Adapted PE teachers in U.S. (n=233)	cross-sectional, quantitative survey	PMQ-PE (Richards et al., 2016) ($\alpha=.88$)	Certified adapted physical education (CAPE) teachers had higher perceptions of mattering than non-certified adapted physical education (APE) teachers as well as less marginalization and role ambiguity. They also had higher perceptions that their subject, APE, mattered.	Teachers with advanced certifications may have more positive workplace experiences and perceptions that their work matters.
Zeijen et al. (2023)	Social workers in Netherlands (n=134)	longitudinal quantitative surveys	2 items from the General Mattering Questionnaire (France & Finney, 2009)	There was a positive association between autonomously motivated support and feelings of mattering. When employees felt they mattered at work they felt positive emotions at home.	Employees who support their coworkers increase their own sense of mattering and experience more positive emotions at home.

Supplemental data 3: Definitions of mattering

Author	Definition/description	Articles using definition
Rosenburg & McCullough (1981)	Mattering is the perception that one is the object of another person's attention, they are important to them, others are dependent on them.	Baguri et al., 2022 Barrenechea, 2022 Connolly & Myers, 2003 Schieman & Taylor, 2001 Soral et al., 2022)
Rosenberg (1985)	Mattering is the perception that one is the object of another person's attention, they are important to them, others are dependent on them, their absence would be noted, and that others feel pride in their successes.	Jung & Heppner (2017)
Marshall (2001)	Perceived mattering can be defined as the psychological tendency to evaluate the self as significant to specific other people. Marshall's conceptualization of mattering included sense of belonging (relatedness) and meaning in life.	Used in combination with Rosenberg & McCullough's definition (1981): Gaudreault et al., 2018 Richards et al., 2019 Richards et al., 2020 Washburn et al., 2020
Elliott et al. (2004)	Elliott divided mattering into two categories, awareness and relationships. Awareness was defined as the cognitive realization of our existence by society. This cognitive interest and attention from others could be positive or negative thus causing people to feel that they do or do not matter. The relationships category of mattering referred to the interpersonal relationships wherein people feel important and valued. Mattering in this sense can be reciprocal and supportive. Elliott placed Rosenberg's mattering tenets within these categories. Attention was included in the category of awareness while importance and reliance were listed as types of mattering within relationships.	Froidevaux et al., 2016 Haizlip et al., 2020 Scarpa et al., 2021 Zeijen et al. 2023
Goldstein (2015)	Mattering consists of excellence in achievement and recognition	Reece et al. 2021
O'Brien (1996)	For something to matter to a person in the relevant sense is for the person to care about it. O'Brien's research emphasized mattering as having an influence, effect, or impact on someone or something else	Reece et al. 2021

Richards et al. (2019)	Original research from Richards dated back to 2016 when he focused on the perceptions of mattering among physical education (PE) teachers within the context of a school system (Richards et al., 2019). Richards et al. (2016) expanded on Marshall's (2001) and Rosenberg & McCullough's (1981) work to include the domains of "teacher matters" and "PE matters" (p. 77). Teacher matters referred to PE teachers' perceptions of mattering as a teacher and PE matters referred to their perceptions that their discipline of PE mattered (Richards et al., 2016).	Wilson et al., 2020 Wilson et al., 2021
Fazio (2009)	Cited Rosenberg & McCullough (1981) original definition	Scarpa et al. 2021
Haizlip et al. (2020)	Cited Rosenberg & McCullough (1981) original definition	Melnyk 2023b
Jung & Heppner (2017)	Cited Rosenberg & McCullough (1981) original definition	Mohamed et al. 2022
Pearlin & LeBlanc (2001)	Cited Rosenberg & McCullough (1981) original definition	Rayle, 2006
Prilleltensky (2020)	Cited Rosenberg & McCullough (1981) original definition	Shaw et al., 2023
Rayle & Myers (2004)	Cited Rosenberg & McCullough (1981) original definition	Rayle, 2006

Supplemental data 4: Measuring mattering

Mattering instrument and author	Description	Articles using instrument and reported internal reliability
<i>General Mattering Scale (GMS; various attributed authors)</i>	The GMS is one of the most frequently used scales to measure mattering in the literature (Flett, 2018). The GMS is attributed to Rosenberg and McCullough (1981), yet it was never published by either author. Studies in this review also attributed the scale to an unpublished paper by Marcus in 1991, and a conference paper by Marcus and Rosenberg in 1987. In the literature, the scale was first cited by Deforge and Barclay (1997) when they tested the internal reliability of the five items within a population of homeless men (Flett, 2018). The instrument's 5 items address Rosenberg & McCullough's (1981) original facets of mattering including: importance, attention, and dependence	Connolly & Myers, 2003 ($\alpha = 0.90$) Di Fabio, 2022 ($\alpha = 0.80$) Froidevaux et al., 2016 ($\alpha = .85$) Powers et al., 2004 ($\alpha =$ not reported)
<i>Mattering Index (Elliott et al., 2004)</i>	The Mattering Index was developed in order to expand on Rosenberg & McCullough's (1981) work and explore different ways people can matter to others (Elliott et al., 2004). The twenty-four-item index separated mattering into the categories of awareness, importance, and reliance.	Soral et al., 2022 ($\alpha=0.92$)
<i>General Mattering Questionnaire (France & Finney, 2009)</i>	France and Finney (2009) developed the General Mattering Questionnaire to expand the GMS and include the factor of ego-extension from Rosenberg's (1985) later research. The 24-item scale also included questions about attention, importance, dependence (France & Finney, 2009).	Zeijen et al. 2023 ($\alpha =$ not reported)
<i>Work Mattering Scale (WMS; Jung & Heppner, 2017)</i>	Jung and Heppner (2017) developed the WMS in order to address the specific psychological experience of mattering within the context of work. Based on Jung's (2015) argument that interpersonal mattering was not sufficient enough to describe mattering at work, the WMS also included items that assessed societal mattering (Jung & Heppner, 2017).	Jung & Heppner, 2017 ($\alpha = 0.88, 0.89$) Haizlip et al., 2020 ($\alpha = 0.89$) Mohamed et al. 2020 ($\alpha = 0.80$)
<i>Mattering in the Domains of Life Scale (MIDLS; Scarpa et al., 2021)</i>	The MIDLS was developed in order to expand the measurement of mattering to include the component of adding value along with feeling valued as outlined by Prilleltensky's (2020) research (Scarpa et al., 2021). Furthermore, the authors wanted to develop a more nuanced approach for measuring mattering within the four contexts of mattering, also outlined by Prilleltensky (2020):	Scarpa et al., 2021 ($\alpha = 0.88$) Scarpa et al., 2022 ($\alpha = 0.87$)

	personal, interpersonal, occupational, and community (Scarpa et al., 2021). The 27-item MIDLS was therefore designed to measure the following nine factors: overall mattering, personal mattering—feeling valued, interpersonal mattering—feeling valued, occupational mattering—feeling valued, community mattering—feeling valued, personal mattering—adding value, interpersonal mattering—adding value, occupational mattering—adding value, and community mattering—adding value.	
<i>Organizational Mattering Scale (OMS; Reece et al., 2021)</i>	Reece and colleagues (2021) argued that interpersonal and societal mattering were not enough to address the concept of mattering within a work setting, positing that mattering at work centered around an employee's actions and the consequences of these actions. They therefore developed the 17-item instrument to capture action-oriented mattering in the work environment.	Reece et al., 2021 ($\alpha = 0.90-.92$)
<i>Perceived Mattering Questionnaire of PE teachers (PMQ-PE; Richards et al. 2016)</i>	The PMQ-PE was developed in order to measure experiences of mattering among PE teachers. Based on role socialization theory, the PMQ-PE focused on the social connections and perceptions of PE teachers within the context of the school (Richards et al., 2016). The 8-item instrument addressed 4 constructs of mattering, attention, importance, dependence, and ego-extension, within two domains: PE matters and Teacher matters.	Gaudreault et al., 2017 ($\alpha = 0.87$) Gaudreault et al. 2018 ($\alpha = 0.80$) Gaudreault et al. 2023 ($\alpha = 0.86$) Richards et al., 2019 ($\alpha =$ not reported) Richards et al. 2020 ($\alpha = 0.79-0.87$) Richards et al., 2022a ($\alpha = 0.90-0.91$) Richards et al., 2022c ($\alpha =$ not reported) Washburn et al., 2020 ($\alpha = 0.83-0.89$) Wilson et al., 2020 ($\alpha = 0.80-0.87$) Wilson et al., 2021 ($\alpha = 0.88$)

<i>School Counselor Mattering Survey (SCMS; Rayle, 2006)</i>	The SCMS was developed specifically for primary and secondary school counselors and measured their perceptions of mattering to students, administrators, parents, and co-workers (Rayle, 2006). According to Rayle (2006) the SCMS was developed specifically for their study but further construct reliability and validity has not yet been tested.	Rayle, 2006 ($\alpha = .91$)
<i>Ways of Mattering Questionnaire (Amundson, 1993, 2003).</i>	Amundson's (1993, 2003) Ways of Mattering Questionnaire twenty-four-item instrument was originally developed for employment counselors and their clients. It addressed the following four dimensions of mattering: attention, importance, dependence, and ego-extension (Corbiere & Amundson, 2007).	Baguri et al. 2022 ($\alpha = .92$)

Other methods of assessing mattering

Study	Method	Mattering assessment
Melnyk et al., 2023a	Cross-sectional quantitative survey	The author did not utilize a scale or instrument for measuring mattering, instead in both studies they posed the single statement "I matter to my college." Participants were able to select their level of agreement or disagreement on a Likert scale; no internal consistency was measured
Melnyk et al., 2023b	Cross-sectional quantitative survey	The author did not utilize a scale or instrument for measuring mattering, instead in both studies they posed the single statement "I matter to my college." Participants were able to select their level of agreement or disagreement on a Likert scale; no internal consistency was measured
Gaudreault et al., 2018	Qualitative interviews of mixed-methods	Phone interviews used standardized, open-ended questions to assess teachers' perceptions about the 4 domains of mattering including: attention, importance, dependence, and ego-extension
Richards et al. 2018	Qualitative interviews	Interview guide included questions that elicited discussion on how teachers perceived they mattered and how they felt the discipline of PE mattered.
Shaw et al. 2023	Qualitative interviews	Interview guide included a question assessing how participants felt they mattered at work
Schieman & Taylor 2001	Qualitative interviews	Structured interview guide included 5 questions to address mattering. While the questions were not from a validated instrument, they did address feelings

		of importance, attention, noted absence, and dependence; authors reported an internal reliability coefficient for these questions of $\alpha = .78$
Barrenechea 2022	Qualitative interviews	Authors did not use prompts for mattering in their interview guides, however they did analyze the discussions of teachers' well-being and motivation through the lens of mattering
Lee et al., 2016	Qualitative interviews	Authors did not prompt for mattering in their interviews, but developed a theme of mattering from their data analysis on the participants responses to questions regarding their experiences as social workers in nursing homes
Richards et al. (2022b)	Qualitative interviews	Authors did not utilize any direct interview questions regarding mattering, but developed a theme regarding how university sociopolitics challenge physical education higher education faculty members' perceived mattering

Chapter 3: Manuscript 2

Exploring How Nurses Matter in the Health Care Work Environment: A Mixed-Method Analysis

ABSTRACT**Aim:**

To explore mattering as a nurse within the health care work environment and the impact of hospital ethical climate on mattering.

Design:

Convergent mixed-method analysis

Methods:

Nurses completed surveys providing demographics, hospital characteristics, experiences of mattering at work, and perceptions of the hospital ethical climate. Individual semi-structured interviews were conducted with a subsample of self-selected nurses. A generalized linear model was selected to analyze the relationships between the independent and dependent variables.

Thematic analysis was used to analyze the qualitative findings.

Results:

Two hundred and forty-three nurses completed surveys and twenty-two participated in individual interviews. Significantly lower mattering scores were found in nurses who identified as a minority race other than Black or White ($\beta = -3.03$, $p < .01$), worked at small hospitals (< 100 beds; $\beta = -2.26$, $p < .05$), or at hospitals with nursing unions ($\beta = -1.90$, $p < .05$). Significantly higher mattering scores were found in nurses who worked at hospitals with formal award programs ($\beta = 2.85$, $p < .01$), and had nursing certifications ($\beta = 1.56$, $p < .05$). Mattering at work was significantly and positively correlated with the hospital ethical climate and its five factors: hospital, management, peers, patients, and physicians.

Conclusion:

Nurses identified work characteristics that influenced how they felt valued and ways they were able to add value at work. The hospital ethical climate was significantly associated with

increased nurse mattering. Nurses who work in facilities where they feel supported, have adequate resources, feel safe, and are respected by peers, physicians, and patients are more likely to have higher perceptions of mattering.

Implications for the profession:

Mattering is a universal psychological need and essential in the workplace. Nurses who feel they matter at work experience less burnout and are more likely to stay. Attending to nurse mattering is an important step in ensuring healthy work environments and supporting nurse well-being.

INTRODUCTION

A healthy work environment is critical for ensuring patient safety, care quality, nursing satisfaction, and nursing retention.^{1,2} Nurses, however, continue to report negative work environment conditions such as unsafe staffing ratios, excessive workloads, lack of collaboration with physicians, negative management culture, lack of opportunities for advancement and support, and an overall toxic work climate.³ Mattering is defined as the sense that one is important to others, the object of another's attention, and that others depend on them.⁴ Mattering is associated with an enhanced sense of well-being, self-esteem, job satisfaction, and workplace meaning.⁵ Feeling valued is an essential component of mattering, a psychological condition necessary for human flourishing.⁵

The 2021 COVID Impact Survey reported that over 30% of nurses did not feel valued by their employer, but felt that work negatively affected their health or well-being.⁶ Nurses who have higher perceptions of mattering to others and their organization are less likely to report feelings of burnout and turnover intention.^{7,8} Organizations that recognize the importance of mattering at work may have an opportunity to mitigate burnout and improve well-being of their nurses.^{7,9} Understanding how nurses matter is an important step for administrators and organizations to enable healthy work environments and support nurse well-being. Mattering is understudied among nurses and research on nurses' perceptions of mattering in the health care work environment is needed.

2 | BACKGROUND

2.1 | Mattering at Work

The concept of mattering was first introduced by social psychologists Rosenberg and McCullough in 1981 who argued that "humans cannot survive, or even be truly human, without other people."^{4(p180)} Mattering is conceptualized as interpersonal feelings of significance to others

through relationships and to society as a whole.⁴ Furthermore, mattering is a balance of the psychological experiences of feeling valued and adding value.⁵

Mattering in the context of work has been explained by Jung¹⁰ as the combination of interpersonal and societal mattering and centers on the theory that work is a relational act. This perspective highlights the role of relationships within an organization as well as the relationship an employee has with work itself.¹⁰ However, Reece and colleagues (2021) argued that in addition to the psychological aspect of mattering, one can perceive their mattering within an organization based on the consequences of their actions.¹¹ According to this view, mattering is action-oriented and is therefore dependent on agency and self-efficacy.¹¹ Employees need to perceive that their contributions at work matter to their organization in order to feel satisfied, engaged, and valued.¹¹

2.2 | Ethical Climate and Mattering

The ethical climate of an organization may be a key component of the work environment that influences how nurses feel they matter. Health care organizations are moral communities wherein health care providers work toward the common moral purpose of attending to the well-being of vulnerable others.¹² The ethical climate of these communities consists of the moral obligations within the organization and the perceived existence of normative ethical patterns.¹³ Nurses' perceptions of their hospital's ethical climate are influenced by the organization's practices and procedures regarding ethical patient care as well as the daily interactions between nurses and the hospital, management, peers, physicians, and patients.¹⁴ To date, there is limited evidence-based information on the impact of ethical climate on nurse mattering. We posit that nurses' perceptions of ethical climate in the organization will impact their overall perceptions of mattering.

METHOD

3.1| Aims

The purpose of this study was to explore mattering as a nurse within the health care work environment and the impact of hospital ethical climate on mattering.

3.2 | Design

A convergent, parallel mixed-method study was conducted.^{15,16} Quantitative (survey questionnaire) and qualitative data (individual interviews) were collected concurrently and analyzed separately before they were converged to illustrate different ways that nurses felt they mattered and what aspects of the work environment influenced these perceptions.

3.3 | Theoretical Framework

The study was guided by Prilleltensky's conceptual framework of mattering. As shown in Figure 1, Prilleltensky's mattering wheel illustrates the associations of the psychological experiences of mattering (feeling valued and adding value) within the contexts of community, work, relationships, and self.⁵ Thus, nurses' perceptions of mattering described as feeling satisfied, engaged, and valued¹¹ are influenced by aspects of the work environment, including the ethical climate.¹⁴

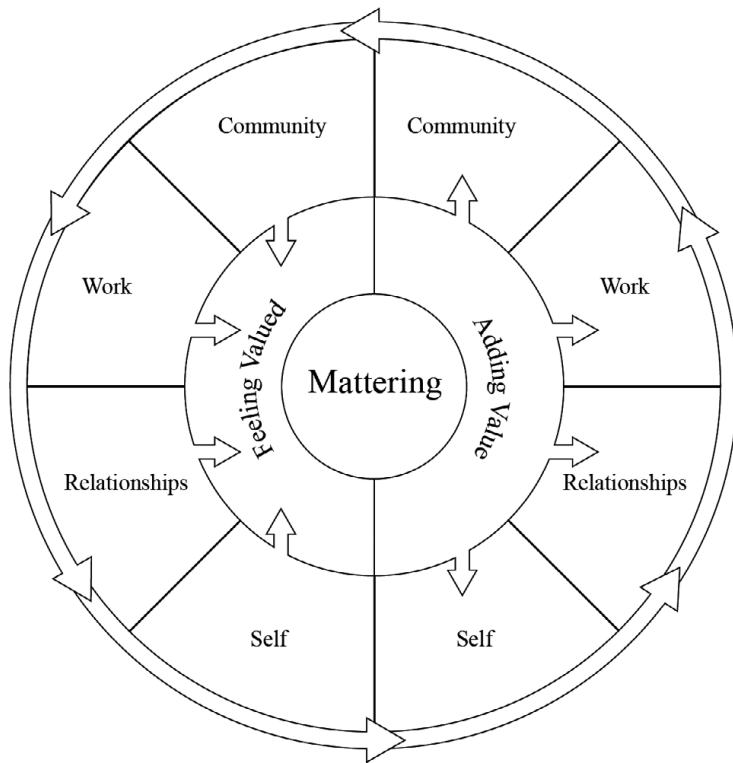


Figure 1: Prilleltensky's Mattering Wheel (reproduced with permission)

3.4 | Sample

This study included purposeful sampling of registered nurses employed in inpatient U.S. hospitals. Study invitations with a secure Qualtrics link were shared on the social media platforms of Facebook, Instagram, Twitter, and LinkedIn. Hashtags, links, and posts were used to connect to potential study participants on nursing community pages on these sites. Nurses who were members of the Southern Nursing Research Society (SNRS) were contacted (by permission from SNRS) via an email blast that displayed the recruitment e-flyer. An e-flyer was also shared with the nursing staff of a southeastern academic medical center connected to the university of the primary researcher. Physical copies of recruitment fliers were also placed in the common areas of the university's school of nursing. Additional participants were recruited through CloudResearch®, an online participant recruitment service.

Screening questions ensured that participants met inclusion criteria before proceeding with the survey. Participants were required to be registered nurses licensed in the U.S. who provided direct patient care in either critical or acute care, inpatient units. Nurses were excluded if they practiced in non-acute/critical care areas such as outpatient, laboratory, ambulatory, or long-term care settings or if they did not provide direct patient care. Participants who completed the Qualtrics survey were invited to submit their name and contact information in order to be entered into a raffle for a gift card or in order to participate further through individual interviews. Therefore, nurses who did not enter their contact information were able to complete the survey anonymously. Nurses who indicated they were interested in individual interviews were contacted by the primary researcher in order to schedule interviews. In order to schedule interviews, participants were required to provide the state where they were licensed as well as their RN license number. The primary researcher verified their licenses through the online Nursys website. In this way, several participants who were fraudulently posing as nurses were not interviewed and their survey responses were destroyed.

3.5 | Ethical considerations

The organization's Institutional Review Board (IRB) approved the study (SBS: 5836). Screened participants were required to review and electronically sign an informed consent document. Participants' privacy and confidentiality were maintained through the de-identification of all transcripts and survey results prior to data analysis. All participants' confidential data was kept in an IRB-approved, highly secured, password protected network.

3.6 | Measures

3.6.1 Dependent Variable

Nurses' perceptions of mattering were measured by the Work Mattering Scale (WMS), a 10-item, 6-point Likert scale that measured both interpersonal and societal mattering within the context of the work environment.¹⁷ An example question was, "I think that society values the work I do." The response options ranged from 1= "disagree very much" to 6= "agree very much." A possible range of the total scores was 10-60 with higher scores indicating a higher sense of work mattering. Jung and Heppner reported an internal reliability coefficient of $\alpha=0.91$ for the WMS.¹⁷ The alpha coefficient of WMS in this study was $\alpha=0.90$.

3.6.2 Independent Variables

Nurses' perceptions of the ethical climate were measured by the Hospital Ethical Climate Survey (HECS), a 26-item, 5-point Likert scale.¹⁴ The scale measured five factors of the hospital ethical climate including hospital, management, peers, physicians, and patients. A sample question was, "Hospital policies help me with difficult patient care issues/problems." The response options ranged from 1= "almost never true" to 5= "almost always true." A possible range of the total scores was 26-130; higher scores indicated more positive perceptions of the ethical climate. Olson reported an initial internal consistency reliability of $\alpha= 0.91$.¹⁴ The alpha coefficient for this study was $\alpha= 0.96$.

Nurse participants also completed demographic questions including age, gender identity, ethnicity, race, years of experience, nursing certification, and highest degree. Nurses were asked to provide information on their work environments including state of employment, type of hospital, size of hospital, hours worked per week, primary shift, primary patient population, and if the hospital had the following: a nursing labor union, Magnet® designation, ethics resources, formal employee award program, and clinical advancement program.

3.7 | Data Collection

Quantitative and qualitative data were collected between August 2023 through December 2023. An online Qualtrics survey was developed and initial screening questions ensured participants met inclusion criteria. Screened nurses were then asked to complete demographic and work characteristic questions as well as two validated instruments to measure mattering and hospital ethical climate. The survey took approximately 15-20 minutes to complete. The responses were exported to Microsoft Excel for initial data cleaning and de-identification prior to export to STATA 18.0 BE (StataCorp LLC, 2023) for analysis.

Individual semi-structured interviews were conducted with a subset of nurses who completed the Qualtrics survey and volunteered to participate in an individual interview. The interview questions were informed by mattering and ethical climate literature. Example questions included, “Tell me about a time when you felt like you mattered at work?” and “What is working well in your work environment for making the nurses feel they matter?” Interviews were recorded and transcribed using Zoom Version 6.1.0 (Zoom Video Communications, Inc., 2018) and Otter.ai Business Version 3.52.0 (Otter.ai, Inc., 2016). The primary researcher reviewed all the transcripts to ensure accuracy and to de-identify responses. De-identified transcripts were stored in a secured, password protect university network folder.

3.8 | Data analysis

Quantitative data analysis was conducted in STATA 18.0 BE (StataCorp LLC, 2023). Descriptive statistics consisted of analyzing the frequencies of categorical variables and the mean \pm standard deviation (SD) of continuous variables. Chi square and paired t-tests were used to compare demographic characteristics between the total study sample and the individual interview sample. Pearson’s correlation was used to examine the relationship between the total scores of

the WMS with the total scores of the HECS as well as the five factors of the HECS. Bivariate correlations were examined among the independent variables and the WMS using Pearson's correlation for continuous variables and Spearman's Rho for categorical and binomial variables. Independent variables that were associated with the WMS (correlation significance with $p < .20$) were selected and entered into a generalized linear regression model (GLM).¹⁸ A GLM model was selected to analyze the relationships between the independent variables and the dependent variable, WMS, while controlling for covariates. Significance was set at $p < .05$.

Thematic analysis was used to analyze the qualitative findings, specifically coding reliability thematic analysis as outlined by Braun and Clarke.¹⁹ Coding reliability is achieved by comparing the consistencies between coders.¹⁹ In this study two researchers independently coded the interview transcripts using NVivo 14.23.3 (Lumivero, 2024) analysis software. The researchers met to discuss, clarify, and resolve any disagreements, and develop a mutual code frame that was reliable and accurately portrayed the data.¹⁹ Once consensus was achieved, the primary researcher re-coded all 22 of the transcripts using this code frame. The primary researcher then grouped codes into categories and inductively developed themes that encompassed main ideas and summarized the findings in relationship to the research question.¹⁹ Subthemes were developed to clarify main themes. The final themes and subthemes were verified by the senior researcher.

RESULTS

4.1 Sample Demographic Characteristics

Six hundred and forty-four nurses were contacted and screened through the survey, but only 243 met all inclusion criteria and completed the survey. The participants were predominantly White (79%), female (85%), age between 26-35 (46%) years old, with 3 to 7

years of nursing experience (37%). Nurses worked in a variety of inpatient hospital settings across 37 different states (see Table 1). About half of participants (52%) worked in teaching hospitals. There were no significant differences between the survey respondents and the interview subsample on demographic variables except for type of hospital, shift and labor union. The majority of the interview group worked at teaching hospitals (n=16, 73%) compared to 52% of the survey group (n=132). The interview group also had a higher percentage of working nightshift (n=13, 59% vs. n=74, 32%) compared to the survey group. Finally, the percentage of nurses working in hospitals with labor unions was higher in the survey group (n=55, 23%) than in the interview group (n=1, 5%). There were no significant differences between the two groups on the mean scores of the WMS ($t = -1.54$, $df = 250$, $p = 0.13$) or the mean scores of the HECS ($t = -0.46$, $df = 250$, $p = 0.65$) (See Table 2).

Table 1: Demographic and workplace characteristics of participants

Variable	Survey respondents (N=243)		Interview sub-sample (n=22)		χ^2	p -value
	n	%	n	%		
Gender identity					0.04	0.84
Male	37	15.2	3	13.6	-	-
Female	206	84.8	19	86.4	-	-
Hispanic					2.31	0.13
No	219	90.1	22	100	-	-
Yes	24	9.9	0	0	-	-
Race Categories					1.02	0.60
Black	27	10.7	1	4.6	-	-
White	200	79.4	19	86.4	-	-
Other	25	9.9	2	9.0	-	-
Age categories					0.48	0.92
<25 years old	19	8.3	2	9.1	-	-
26-35	106	46.1	9	40.9	-	-
36-45	56	24.3	5	22.7	-	-
>46	49	21.3	6	27.3	-	-
Years of Experience					1.87	0.60
0-2 years	22	9.6	2	9.1	-	-
3-7	83	36.1	5	22.7	-	-
8-12	56	24.3	6	27.3	-	-

>13	69	30.0	9	40.9	-	-
Highest Education	-	-	-	-	1.86	0.40
Associates	64	25.4	3	13.6	-	-
Bachelors	123	48.8	13	59.1	-	-
Graduate	65	25.8	6	27.3	-	-
Nursing certification	-	-	-	-	1.23	0.27
No	129	53.3	9	40.9	-	-
Yes	113	46.7	13	59.1	-	-
Type of hospital	-	-	-	-	4.0	0.05 *
Teaching	132	52.4	16	72.7	-	-
Non-teaching	120	47.6	6	27.3	-	-
Hours worked per week	-	-	-	-	3.03	0.39
1-20	21	8.7	1	4.5	-	-
21-35	43	17.9	7	31.8	-	-
36-40	137	57.1	12	54.6	-	-
>40	39	16.3	2	9.1	-	-
Primary shift	-	-	-	-	6.86	0.03 *
Day	136	59.1	7	31.8	-	-
Night	74	32.2	13	59.1	-	-
All shifts	20	8.7	2	9.1	-	-
Labor Union	-	-	-	-	4.22	0.04 *
No	185	77.1	21	95.5	-	-
Yes	55	22.9	1	4.5	-	-
Magnet® hospital	-	-	-	-	0.10	0.76
No	114	47.5	11	50.0	-	-
Yes	126	52.5	11	50.0	-	-
Ethics resources	-	-	-	-	0.60	0.44
No	61	25.4	4	18.2	-	-
Yes	179	74.6	18	81.8	-	-
Formal award program	-	-	-	-	2.34	0.13
No	40	16.7	1	4.5	-	-
Yes	199	83.3	21	95.5	-	-
Clinical advancement program	-	-	-	-	0.04	0.84
No	36	15.0	3	13.6	-	-
Yes	204	85.0	19	86.4	-	-

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2: Mean WMS and HECS group comparisons

Instrument	Mean	SE	SD	95% CI	
Work Matter Survey					
Survey participants	47.90	.53	8.01	46.86	48.94
Interview participants	50.64	1.57	7.35	47.38	53.90
Hospital Ethical Climate Survey					
Survey participants	99.60	1.22	18.51	97.20	102.0
Interview participants	101.5	4.07	19.11	93.02	109.9

4.2 | Quantitative findings

The WMS was significantly correlated with the HECS total score ($r = .74$, $p < .001$), as well as each individual factor of the hospital ethical climate (see Table 5). There was also a significant relationship between WMS and nurses who identified as Black ($r = 0.13$, $p < .05$), older age ($r = .25$, $p < .001$), more experienced ($r = .24$, $p < .001$), and working at hospitals with ethical resources ($r = .23$, $p < .001$) and formal awards programs ($r = .16$, $p < .05$). There were no significant relationships between WMS and the remaining independent variables (see Table 3).

Table 3: Pairwise correlations between demographic and work characteristics (independent variables) with Work Matter Scale (dependent variable)

Variables	Correlation coefficient	p-value
HECS	0.742	.000 ***
Race		
Black	0.131	.048
White	0.023	.733
Other	-0.084	.211
Hispanic	0.039	.563
Age	0.246	.0002 ***
Experience	0.238	.0003 ***
Highest degree	0.085	.203
Type of hospital	-0.082	.215
Shift	0.010	.881
Nursing certification	0.087	.191
Hospital size	-0.09	.177
Labor union	-0.107	.107
Magnet® hospital	-0.063	.346

Ethical resources	0.234	.0004 ***
Formal award program	0.156	.019 *
Clinical advancement program	0.084	.210

* $p < .05$, ** $p < .01$, *** $p < .001$

4.3 Generalized linear model

Variables with p values $< .20$ (see Table 3) were entered into the GLM with WMS as the outcome variable. The independent variables included: HECS score, race, age, years of experience, nursing certification, size of hospital, labor union, ethics resources, and formal awards program. The GLM demonstrated positive and negative relationships (beta weights) between each of the independent variables with WMS scores (see Table 4).

Nurses who identified their race as other (including Asian, Native American/Alaskan Native, Native Hawaiian or Pacific Islander) had significantly lower mattering scores than White nurses ($\beta = -3.03$, $p < .01$). No significant differences were found between Black and White nurses ($\beta = 0.67$, $p = .54$). Nurses with specialty nursing certifications reported significantly higher mattering scores than nurses without certification ($\beta = 1.56$, $p < .05$). No additional significant differences among demographic variables, age or years of experience, were identified.

Nurses working in small hospitals (fewer than 100 beds) had significantly lower mattering scores than nurses working in large hospitals (> 500 beds; $\beta = -2.26$, $p < .05$). Similarly, nurses working at hospitals with nursing labor unions reported significantly lower mattering scores than those working at hospitals without nursing unions ($\beta = -1.90$, $p < .05$). Nurses who worked at hospitals with formal awards programs such as DAISY® had significantly higher WMS scores ($\beta = 2.85$, $p < .01$). Finally nurses who had higher HECS scores also reported significantly higher WMS scores ($\beta = 0.31$, $p < .001$). There were no significant differences among the remaining workplace characteristics.

Table 4. Generalized linear model

Work Mattering Survey	Coef.	SE.	z	p-value		[95% Conf Interval]	
Hospital Ethical Climate Survey	0.31	0.02	15.78	.000	***	0.28	0.35
Race:							
White (ref)	0	-	-	-		-	-
Black	0.67	1.10	0.61	0.54		-1.49	2.83
Other	-3.03	1.19	-2.54	0.01	*	-5.36	-0.69
Age:							
<25 years old (ref)	0	-	-	-		-	-
26-35 years old	0.19	1.78	0.10	0.92		-3.31	3.68
36-45 years old	0.42	1.98	0.21	0.83		-3.47	4.31
>45 years old	0.87	2.15	0.40	0.69		-3.35	5.08
Years of Experience:							
<2 years (ref)	0	-	-	-		-	-
3-7 years	-1.73	1.70	-1.01	0.31		-5.07	1.61
8-12 years	-0.91	1.83	-0.50	0.62		-4.50	2.68
>13 years	-0.35	2.03	-0.17	0.86		-4.34	3.64
Nursing certification:							
No (ref)	0	-	-	-		-	-
Yes	1.56	0.74	2.11	0.04	*	.11	3.00
Hospital size:							
Large: >500 beds (ref)	0	-	-	-		-	-
Medium: 100-499 beds	0.14	0.78	0.17	0.86		-1.40	1.67
Small: fewer than 100 beds	-2.26	1.10	-2.06	0.04	*	-4.41	-0.11
Labor Union:							
No (ref)	0	-	-	-		-	-
Yes	-1.90	0.87	-2.18	0.03	*	-3.62	-0.19
Ethics resources:							
No (ref)	0	-	-	-		-	-
Yes	-0.56	0.92	-0.60	0.55		-2.36	1.25
Formal award program:							
No (ref)	0	-	-	-		-	-
Yes	2.85	1.0	2.84	0.004	**	0.88	4.81

* $p < .05$, ** $p < .01$, *** $p < .001$

4.4 | Qualitative results

Thematic analysis identified five emerging themes from the interview transcripts: 1)

Support and resources necessary for mattering 2) Leadership's role in mattering, 3) Mattering

when making a difference for patients, 4) Interprofessional relationships with peers affect mattering, 5) Mattering when collaborating with physicians.

4.4.1 | *Support and resources necessary for mattering*

Nurses described feeling that they mattered when the hospital provided them with the support they needed in areas such as fair pay, safe staffing, and resources. A nurse stated:

I think the biggest thing that [hospital name] has done to make people feel more valued is a lot of the pay adjustments done last year... I think that bridging that gap in pay is really helped making them feel valued (ID 36).

One shared how staffing shortages affected their mattering:

I don't feel like I matter when I'm in charge. I can't do anything about staffing. (ID 12).

Another reflected:

The worst time for me is when I'm in that situation where I'm the only RN. I feel like at those times, my safety doesn't matter. My coworker's safety doesn't matter (ID 74).

Several nurses discussed how unsafe situations made them feel they did not matter. One argued that nurses have a right to feel safe at their job:

We just don't feel very supported. We've had a lot of workplace violence lately... you need to feel like you are at least safe at your job (ID 82).

4.4.2 | *Leadership's role in mattering*

Nursing management played an important role in how nurses perceived they mattered at work. Nurses felt valued when their managers were approachable, present on the unit, and listened to their concerns. One nurse stated:

My manager is really into making sure that we're safe, so she makes sure as a charge nurse, that we don't have a patient load if we don't have to... (ID 47).

Being heard by management was very important to nurses. One stated:

People just want to feel valued. They want to feel listened to. They want to feel like what they're saying people are truly hearing it and taking it seriously... I think it just really just starts affecting people's morale on the unit, when they just feel like they [management] don't really care (ID 94).

Another described how it was their manager who made them feel they truly mattered:

I have picked up a lot of extra shifts when we're short... a manager that I never see came to me and thanked me herself personally, and that really made me feel like I mattered (ID 34).

4.4.3 | *Mattering when making a difference for patients*

Nurses understood the importance of their role in patient care and felt that they mattered when they are able to make a difference in the lives of their patients and their families. One nurse stated:

What really gets me excited and really makes me feel like I really matter is when I am able to see their [patients] numbers drop and get them off of dialysis. It's the best feeling in the world (ID 20).

Another reflected:

I am thankful that what I did wasn't in vain, right, like all the all the hard work and sleep deprivation and those types of things. To find out how those patients are doing after we dropped them off... I think that does a lot for me and that keeps me going (ID 88).

Others discussed how they valued the relationships they built with patients. One nurse stated:

It's life changing to have a baby. And so just making sure that that's the best experience it can be. So that's what I'm in it for is relationships and feeling like you make a difference (ID 73).

4.4.4 | Interprofessional relationships with peers affect mattering

Nurses reflected on the many ways that they mattered to their fellow nurses. One argued that these relationships were the reason they did not leave their job:

We kind of joke [that work] is like an abusive ex-boyfriend... we have such a good time and care about each other so well that it does make you want to stay (ID 6).

Another nurse also reflected on these relationships:

[When] we've actually had all our staff on certain shifts, that feels really good. I think people recognize that. They were like, "Hey, it's all us today. Like this is gonna be great. We're gonna have a good day" (ID 33).

Others discussed the importance of these relationships and how they were affected by turnover.

One nurse stated:

There's very little we can do by ourselves... So it kind of fosters that collaboration and closeness within the staff... I have amazing coworkers and it's one of the only reasons why I'm left staying where I'm working (ID 94).

4.4.5 | Mattering when collaborating with physicians

Nurses also discussed how their perceptions of mattering were affected when working with physicians. They felt they mattered when physicians treated them with respect and as part of the team.

But I really feel like the physicians take our input. You know, it's an excellent collaboration... it's a good team. I think we're all there for that same goal (ID 42).

Others discussed the importance of collaboration with physicians:

There is a culture that has been more supportive of building that physician and nurse relationship. They have to trust us a whole lot cause we're there and they're not always there. They're running their own offices. They're not even in the hospital most of the time. So it has to be a good one (ID 73).

However, when there were instances of interpersonal conflicts, lack of respect, and barriers to including nurses in patient care decisions, nurses felt they did not matter. One nurse felt they did not matter when their concerns were disregarded by a physician:

But I felt like I didn't matter to that doctor when he didn't listen to me (ID 25).

Another nurse felt they did not matter when a physician blamed them for a mistake they made:

So the resident that clamped [the external ventricular drain] totally threw me under the bus in rounds in front of all the other neurosurgery residents and I felt so small because I knew that I had not done that... And he just spoke down to me so that did not go well (ID 36).

4.5 | Integration of quantitative and qualitative results

The quantitative and qualitative findings were integrated and the five HECS factors hospital, management, patient, peers, and physicians were aligned with found to be aligned with experiences of mattering at work. Additionally, the findings were assessed within the context of Prilleltensky's conceptual framework.⁵ Table 5 demonstrates integration and alignment of qualitative themes with the quantitative results of the HECS factors and Prilleltensky's mattering wheel.⁵

Table 5: Integration of findings

HECS Factor description	Mattering Wheel	Factor correlation to WMS	Qualitative theme exemplar quote	Integration
Hospital Perceptions of hospital's mission, policies, dealing with conflict, respect for employees, problem solving, support of ethical practice	Feeling Valued	$r=.65, p<.001$	Support and resources necessary for mattering <i>I'm sure every nurse at a hospital would agree that the staffing numbers versus the ratios...just feel like a lot... there have been more and more responsibilities placed on bedside nursing and less room for error, on top of being short staffed or being understaffed and being expected to take care of the patient workload that you're given...it just feels unsafe sometimes (ID 90).</i>	Hospital level factors such as staffing, resources, and support impact how nurses perceive they matter.
Management Perceptions of management's help, support, listening, trustworthiness	Feeling valued	$r=0.61, p<0.001$	Leadership's role in mattering <i>Feeling listened to, I think, is a big thing. And that's something that has been a real issue, particularly recently where we've raised serious concerns... but then no action is taken on what we're saying. And it does really affect how it makes you feel on the unit (ID 94).</i>	Management factors such as support, communication, and respect impact how nurses perceive they matter.
Patients Perceptions of patient care including patient expectations and wishes, and nurses' access to information needed to provide quality care	Feeling valued and adding value	$r=.71, p<.001$	Mattering when making a difference for patients <i>I guess the things that make me feel that I matter is that I'm having an impact on the outcome of the patient's care. That's it. That's how I feel like I matter. Because I see things happen that are positive. And not every</i>	Patient care factors such as patient relationships and role in care impact how nurses perceive they matter.

			<i>patient has a great outcome. Some of the outcomes are not so great, but I have to feel like that I've contributed as much as I can for a positive outcome to occur (ID 16).</i>	
Peers Perceptions of how fellow nurses listened to their concerns, provide support, as well as their confidence in their peers' competence and ability to provide safe patient care	Feeling valued and adding value	$r=.72, p<.001$	Interprofessional relationships with peers affect mattering <i>For me, it's my relationship with my nurses. I've been there for so long, and I've seen a ton of turnover, but I want my younger staff to know that they can come to me and ask a question... so really seeing the nurses grow makes me feel good (ID 12).</i>	Interprofessional relationship factors between nurses such as teamwork and support impact how nurses perceive they matter.
Physicians Perceptions of trust, respect, and inclusion in patient care decisions between nurses and physicians	Feeling valued and adding value	$r=.65, p<.001$	Mattering when collaborating with physicians <i>I remember my attending being so excited and thanking me for paying such close attention. It made me feel that my practice and what I was doing mattered and it was just like that very true, genuine like joy and appreciation (ID 36).</i>	Interprofessional relationship factors between nurses and physicians such as collaboration and respect impact how nurses perceive they matter.

DISCUSSION

This study explored mattering as a nurse within the health care work environment and the impact of hospital ethical climate on mattering. The mixed methods design contributed to a rich understanding of how nurses both feel valued and add value at work in the context of their work environment.

Some nurse-specific characteristics were associated with higher levels of mattering including race. Black or African American nurses' perceptions of mattering were not significantly different than White nurses. However, nurses who identified as other minority races, including Asian, American Indian, Alaskan Native, and Native Hawaiian or Pacific Islander, had significantly lower mattering scores than White nurses. De-valuing based on race can decrease a person's sense of mattering.²⁰ We observed racial disparities among our sample of nurses, however, Black nurses only made up 11% of our sample along with 10% of other minority nurses. Further research on mattering with more diverse samples may provide further insight into the effects of racial disparities in the hospital work environment.

Nurses with specialty nursing certifications had significantly higher levels of mattering than nurses who were not certified. Nurses shared how they felt they mattered when they made a difference in their patients' lives. Nursing certification recognizes a nurse's advanced knowledge, training, and competency.²¹ Nurses felt valued when they were recognized for their expertise and experience, especially when the hospital supported them in attaining their certification. Certified nurses also positively impact patient care,²¹ therefore certified nurses may feel they are adding value at work through specialty care. Mattering scores among other nursing factors such as highest degree, years of experience, and shift worked were not significantly different nor were there any salient themes developed around these characteristics.

Important work characteristics that influenced mattering included the size of hospital where nurses were employed. Nurses working at large hospitals (500+ beds) had significantly higher levels of mattering than nurses who worked at hospitals with less than 100 beds. Nurses shared how resources available to them at work and the level of administrative and managerial support contributed to how they felt they mattered. Previous studies have shown that smaller hospitals are more likely to have fewer financial and staff resources²² and that employee satisfaction tends to be higher in larger hospitals.²³ In this study, nurses shared that the collaborative culture with physicians is noticeably different and less satisfactory at smaller, non-academic hospitals. However, there were no significant differences in nurse perceptions of mattering between teaching and non-teaching hospitals.

Nurses who reported working at hospitals with a nurse labor union had significantly lower mattering scores than those whose hospitals did not have nursing unions. Approximately 19% of U.S. nurses, and 23% of our sample, were represented by labor unions.²⁴ Nurses' unions can provide benefits to nurses through collective action on policies, procedures, and practices that can improve nurse well-being.²⁵ However, some studies demonstrated that labor unions can also have a negative effect on nurses' job satisfaction due to mandatory mediation and strike requirements, preference for seniority over merit, and payment of dues.^{24,26} When strikes occur, there are lasting negative effects on trust, communication, and collaboration between nurse leadership and staff nurses.²⁶ In our study, working in a hospital with a nursing union was significantly correlated with identifying as a minority race. Lee and colleagues²⁴ also reported that union nurses were more likely to be minorities. Further research is needed to understand the relationship between labor unions and nurse mattering.

Nurses who worked at hospitals with formal award programs felt they mattered more than nurses who worked at hospitals that did not provide any hospital level recognition. Meaningful recognition, defined as acknowledging the value of someone's contributions, is positively correlated with compassion satisfaction and negatively correlated with nursing burnout.²⁷ Nurses provided examples of formal hospital award programs including DAISY Award®, Bravo Award, Good Catch Award, and Nurses' Week events and described how these formal recognitions increased their mattering. Nurses also shared how meaningful recognition came from receiving praise and thanks directly from their peers and nursing management.

The innovation of this study was to examine the association between mattering and the hospital ethical climate. The study showed the significant and positive impact of the hospital ethical climate on the perceptions of nurses' mattering. If nurses perceived their place of employment as highly ethical, they were significantly more likely to have higher perceptions of mattering. All factors of the hospital ethical climate, including hospital, management, patients, peers, and physicians, were positively correlated with mattering. Nurses' experiences of mattering aligned with each of these factors. The most significant factor was peer interactions. Nurses shared many examples of how they relied heavily on their fellow nurses for encouragement and support at work. They shared the importance of not only feeling that they mattered to their peers, but that they were able to support and encourage others and therefore add value. These interpersonal relationships enabled reciprocal mattering. Relationships with patients also provided opportunities for adding value and feeling valued. Not only was it meaningful for nurses to be acknowledged and appreciated by their patients, but they spoke at length about how they knew they mattered because the care they provided impacted patients' lives. Our study results aligned with another study conducted with nurses in a large academic medical center that

reported nurses rated the HECS factors of peers and patients the highest, positing that nurses view their relationships with these groups are more positive and influential in their responses to ethical dilemmas.²⁹ Our qualitative findings were congruent with a systematic review that found workplace relationships between peers and patients were major factors in nurses' psychological health and job performance.² Negative workplace environments and poor management policies to address incivility, violence, and verbal abuse among co-workers were associated with nursing burnout and turnover.²

5.1 Limitations

The study used descriptive and correlational design, but without a control group, the research team cannot draw conclusions on the impact of the independent variables on the dependent variable (WMS). Participants were able to self-enroll in the study and data collection relied on self-report which could lead to sampling biases. Regardless of the limitations, the study has notable strengths. For example, the results showed similar characteristics between the total sample and the interview sample. Qualitative findings supported the interpretations of the quantitative findings, particularly the association between HECS and mattering in the hospital work environment. A larger longitudinal study is warranted to examine these relationships and address racial disparities in the workplace.

CONCLUSION

Many aspects of the health care work environment play a role in how nurses perceive they matter. Nurses identified factors that influenced how they felt valued as well as ways that they were able to add value at work. Mattering is associated with increased job satisfaction, well-being, and retention among nurses. Health care institutions must attend to the mattering needs of their nurses in order to address the current crises of nursing burnout and turnover in the U.S.

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Chapter 4: Manuscript 3

Supporting a healthy work environment by attending to nurse mattering

ABSTRACT**Object:**

The purpose of this study was to identify aspects of the health care work environment that influence nurses' perceptions of mattering.

Methods:

Qualitative data were collected from a mixed-method study that explored nurses' perceptions of mattering in the health care work environment. This secondary data-analysis focused on nurses' descriptions of what influenced their perceptions of mattering at work and their suggestions for how to improve mattering among nurses.

Results:

Twenty-two screened nurses participated in interviews. The following themes were deductively developed from the data: 1) Mattering as an individual, 2) Having a voice is important for mattering, 3) Recognition and appreciation support mattering, 4) Attending to well-being enhances mattering. Recommendations for workplace changes to enhance nurse mattering were made based on themes and participants' suggestions.

Conclusion:

Mattering is an essential part of a healthy work environment that supports nurse well-being and psychological health. There are multiple workplace factors that impact how nurses perceive they matter, and these influences can be addressed through workplace changes and interventions. Attending to nurse mattering may cause nurses to feel that they are valued members of the health care organization and lead to improvements in nursing burnout and turnover.

Keywords:

Mattering, burnout, turnover, healthy work environment

INTRODUCTION

Before the COVID-19 pandemic, burnout levels among U.S. nurses were high and staff turnover negatively affected the health care system (Dyrbye et al., 2017; Rinne et al., 2020). The unsafe working conditions of the COVID-19 pandemic further impacted health care work environments and caused a critical shortage of nursing care due to unprecedented nursing turnover rates (Aiken, 2021; Lowman & Harms, 2022; Ulrich et al., 2022). In 2022, 52% of nurses who left employment did so due to burnout while 66% considered leaving due to burnout (HRSA, 2024). Negative work environments also caused the U.S. health care system to lose nurses from the profession entirely. In 2023, the National Council of State Boards of Nursing reported that 100,000 registered nurses left the workforce during the COVID-19 pandemic and estimated that over 600,000 nurses intend to leave the nursing workforce by the year 2027 due to stress, burnout, and retirement (Martin et al., 2023). Burnout, a “syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment,” (Maslach, 1982, p. 2) is pervasive in all levels of health care (Bodenheimer & Sinsky, 2014). However, Maslach, one of the most prolific researchers of burnout and the author of the Maslach Burnout Inventory, stated, “People can do more than just cope with the environment—they can try to change it” (Maslach, 1982, p. 118).

A healthy work environment is essential for nurse well-being and psychological health (Ulrich et al., 2022). According to the U.S. Surgeon General, an important way health care organizations can build healthy work environments is to focus on mattering (U.S. Surgeon General, 2022). Mattering is the perception that one is significant to others and the world around them (Rosenberg & McCullough, 1981). While mattering has only recently been studied in health care contexts (Haizlip et al., 2020; Higgins et al., 2022; Mohamed et al., 2021), there are decades of research on the powerful effects of mattering on self-esteem, self-compassion, mental

health, job satisfaction, meaningfulness of work, organizational commitment, and well-being (Elliott et al., 2004; Flett, 2022; Jung & Heppner, 2017; Marshall, 2001; Prilleltensky & Prilleltensky, 2021; Reece et al., 2021; Rosenberg, 1985; Rosenberg & McCullough, 1981).

The concept of mattering was first introduced by social psychologists Rosenberg and McCullough in 1981 (Jung, 2015). Attention, importance, and dependence were originally defined as the foundational dimensions of mattering (Rosenberg & McCullough, 1981). In the following years ego-extension, knowing that you matter because similar emotions and reactions occur with people you are connected to, and appreciation were later added by Rosenberg, Maslach, and Schlossberg, respectively (Maslach et al., 1985; Rosenberg & McCullough, 1981; Schlossberg, 1989). Prilleltensky (2020) posited that there are two psychological experiences of mattering, feeling valued and adding value. He argued that there must be a balance between caring for others by adding value and being cared and feeling valued by others in all aspects of our lives (Prilleltensky, 2020).

Mattering at work is essential (Flett & Zangeneh, 2020). The extent to which employees perceive that organizations value their contributions strongly predicts their job productivity and well-being (Reece et al., 2021). Mattering is also positively correlated with employees' intentions to stay (Kurtessis et al., 2017). Optimal work environments are enabled when employees feel that their strengths and contributions to the organization are valued, effective communication is encouraged, and staff are empowered in their decisions and teamwork (Wei et al., 2018). When the work environment is rewarding, empowering, supportive, and contributions are valued, employees feel that they matter to the organization and are more likely to stay (Prilleltensky, 2020).

Researchers and organizations such as the American Association of Critical-Care Nurses (AACN), the American Nurses Association (ANA), American Organization for Nursing Leadership (AONL) have made calls for systemic changes to the health care work environment (ANA, 2023; Kennedy, 2022). Mattering may be an upstream solution to nursing burnout and turnover, and targeted interventions to enhance mattering may be useful for making systemic changes to the nursing work environment. A recent cross-sectional study of nurses in the United States identified a significant negative correlation ($r = -.47$, $p < .01$) between mattering and burnout and a significant positive correlation between mattering and work engagement ($r = .50$, $p < .01$) (Haizlip et al., 2020).

Research in other disciplines has shown the impact of mattering in a variety of settings. Reece (2021) reported that employee perceptions of mattering to their organizational was positively correlated with job satisfaction ($r = 0.51$, $p < .001$) and negatively associated with intent to leave ($r = -0.31$, $p < .001$). Baguri (2022) found that mattering was associated with secondary school teachers' resilience ($\beta = 0.151$, $p = 0.016$). Among adult workers, mattering was also related to satisfaction in life ($\beta = 0.34$, $p < .01$) and flourishing ($\beta = 0.41$, $p < .01$) (Di Fabio, 2022) while among university students, meaning in life was strongly predicted by mattering ($\beta = 0.23$, $p < .001$) (Costin & Vignoles, 2022).

The research on mattering among nurses is very limited and to our knowledge no studies have explored how nurses perceive they matter at work and what aspects of the work environment play a role in shaping these perceptions. The purpose of this study was to identify what specific work factors influenced nurses' perceptions of mattering and to make recommendations for future workplace interventions to enhance nurse mattering.

METHOD

2.1 Study design and conceptual framework

Qualitative data were collected from a mixed-method study that explored nurses' perceptions of mattering in the health care work environment (Hall et al., in press). The larger study utilized Prilleltensky's (2020) conceptual mattering framework guide data collection through analysis, focusing specifically on the domain of mattering, both feeling valued and adding value, at work. For this secondary data-analysis, we focused on nurses' descriptions of what influenced their perceptions of mattering at work and their suggestions for how to improve mattering among nurses.

2.2 Participants.

Purposeful sampling of registered nurse participants was described in detail in Hall and colleagues (in press). Nurses were recruited using a variety of online measures including social media advertisements and posts, email listservs, and newsletters. Screening questions ensured only nurses who were licensed and employed in the U.S. and worked directly with patients on acute or critical care inpatient units.

2.3 Data Collection.

Semi-structured interviews were conducted on Zoom between August- December 2023. Audio was recorded via Zoom and Otter.ai and transcribed verbatim. Participants were asked to describe their nursing roles, work environments, as well as the people that they worked closely with. Nurses were then asked to share examples of what made them feel they did or did not matter within this context. Finally, nurses were asked to give suggestions for changes in the work environment that would improve nurse mattering.

2.4 Data Analysis.

A secondary data analysis was conducted on the transcripts of the individual nurse interviews and was guided by coding reliability, one of Braun and Clarke's (2022) specific branches of thematic analysis. Coding reliability thematic analysis ensured the coding frame accurately portrayed the data through the use of two researchers to collaborate through intercoder agreement (Braun & Clarke, 2022). This collaboration was outlined by Braun and Clarke as a tool to, "develop a richer more nuanced reading of the data, rather than seeking a consensus on meaning" (Braun & Clarke, 2019, p. 594). Therefore, the goal was to focus on organizing, summarizing, and constructing themes across the entire data set rather than only focusing on individual cases (Braun & Clarke, 2022).

After initial open coding, the two researchers met to discuss and develop a mutual code frame. Once consensus was agreed upon, the primary researcher re-coded all 22 of the transcripts using this code frame. Codes were then organized into categories that summarized contexts of the conversations. Categories were then developed inductively into themes that served as topic summaries to address the research question, as outlined by Braun & Clarke's thematic analysis (2022). A panel of mattering and qualitative researchers provided expert review of the code definitions, category development, and final themes.

2.5 Trustworthiness

The study was guided by the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Booth et al., 2014) as well as Lincoln and Guba's (1985) criteria for trustworthiness. The principal investigator immersed themselves in the transcripts over a period of several weeks and reported analysis decisions with the senior author. Coding reliability enabled accountability and consistency of coding with a qualitative researcher separate from the study. Peer review by

an expert panel of mattering and qualitative researchers was utilized to examine thematic analysis. The principal investigator practiced reflexivity through journaling and bi-monthly discussions with the senior author.

2.6 Ethical Considerations.

The university Institutional Review Board (IRB) approved the study. All nurse participants' data was kept in a high-security, IRB-approved, virtual protected network folder. All members of the research team were included on the protocol and had up-to-date Collaborative Institutional Training Initiative (CITI) training.

RESULTS

3.1 Participant characteristics

The sample was previously described in Hall and colleagues (in press). Twenty-two interviews were completed, ranging from 21-70 minutes in length with an average of 37 minutes. The majority of interview participants were female (86%, n=19), White (86%, n=19), between 26-35 years old (41%, n=9), and with a bachelor's degree (59%, n=13) and nursing certification (59%, n=13). The average years of experience was 14 (range 1-44 years, median 11). Participants were employed in eight different states in the U.S., and the majority worked in academic medical centers (72%, n=16).

3.2. Qualitative findings.

Secondary data analysis focused on what aspects of the work environment that impacted nurse mattering, and the following four themes were developed inductively through thematic analysis, 1) Mattering as an individual, 2) Having a voice is important for mattering, 3) Recognition and appreciation support mattering, 4) Attending to well-being enhances mattering. In addition, suggestions for work environment improvements that would improve nurse

matterings are also discussed below. These suggestions were matched with corresponding themes and codes from the thematic analysis and are illustrated together in Table 2.

3.2.1 Matterings as an individual.

Nurses discussed the need to feel valued by their employer as an individual with unique experiences and attributes, rather than viewed as a number or a body to fill a role. Nurses felt their individual work-life balance did not matter when their requests for accommodations were not considered.

I don't know that I would say [I matter] as an individual. I feel like if I were to quit or be fired, I would be replaced... you know you're expendable (ID 90).

I've been here five years, and they [administration] probably don't even know who I am. You know, it just seems like they could be a little more involved (ID 33).

It's very disheartening because I've been there at the same place for 10 years and I just feel like they don't value my opinion and my experience (ID 68).

Other nurses reflected that they, like patients, were valuable individuals who deserved respect.

However, many of the nurses experienced disrespect, bullying, and incivility, thus causing them to feel they did not matter.

You know, we're very patient-centered as we should be. But I still feel like nurses are people and humans too, and we should be treated with respect (ID 82).

There were so many things wrong with the way this was handled. [The manager] called me to a meeting in a supply room? What was that? Then the conversation happened with her standing over me, interrupting me. So I went to the ethics person. Because I was like is that how they're treating people? (ID 42).

3.2.2 Having a voice is important for matterings.

Nurses felt they mattered when their concerns were listened to by others and when they had opportunities to voice their opinions in decisions at work. Others recognized that open communication empowered nurses to use their voice.

I think that they have a lot of direct communication with their supervisors... our nurses are so empowered...to reach out to whoever they want to reach out to and contact about stuff. So I think that works very well because there are no blocks in any communication (ID 77).

Nurses shared how they knew they mattered when management actively sought out their needs and took their concerns seriously. However, when nurses felt that their voice was dismissed or their concerns were ignored and left unaddressed, they felt they were not valued.

They don't second guess what I have to say, and I think that goes to show the seriousness behind it, and how much it matters, what I do and what I say (ID 47).

And I think that that is a serious issue on my unit about nurses just feeling valued and listened to. And I think that that has led to some people leaving... They want to feel like what they're saying people are truly hearing it and taking it seriously (ID 94).

It was important to the nurses that their concerns were addressed and responded to, even when the requests could not be met. Receiving that acknowledgement and feedback from administration and/or management made them feel that their concerns mattered.

[There] is a lack of looping back with staff do you know I mean, like we raise an issue, we get told it's been looked into, and then we hear nothing (ID 94).

3.2.3 Recognition and appreciation support mattering.

Nurses shared how recognition and appreciation that was personal and meaningful impacted how they felt valued by others at work. Nurses discussed the importance of being recognized for their hard work but noted that hospital-wide celebrations did not necessarily impact their mattering:

I think we have to seek our rewards in small places sometimes. And I think recognition is one of those places. It's not money, it's not bells and whistles, but it is recognition that you made a difference. (ID 16).

I think there's a lot of things that [hospital name] does, like during Nurses Week and Hospitals Week and all of that but I think the nurses appreciate it... but I don't know that it necessarily gets to the heart and soul, you know. (ID 36).

What did have an impact, however, was when nurse leaders valued them, acknowledged their work, and demonstrated to them that they mattered.

I believe that I matter to my manager. I believe that I matter a lot to my manager (ID 54).

[I matter] every day I work...the first thing I get there in the morning, my manager is calling me, asking me how things are going. What do you need? What's going on? (ID 47).

3.2.4 Attending to well-being is essential for mattering.

Nurses discussed how they felt they did not matter when their safety was disregarded, they were unsupported during moral distress situations, and when the unit culture became toxic. Participants shared many concerns about their physical, psychological, and patients' safety. Many of the nurses described unsafe staffing situations.

Having one nurse for 40 patients, it's just like, it doesn't work like I sometimes I feel like they don't listen and we're just like, listen, I can't keep eyes on all these patients (ID 47).

Well, morale is really down right now... we're understaffed. I just can't even describe the level of stress for everybody there. It's almost, I hate to say toxic. I mean, just everybody from the top down I think is just feeling a lot of angst over staffing (ID 82).

Almost every nursing participant was able to share examples of moral dilemmas at work. Nurses discussed the importance of feeling heard, supported by management, and included in patient care decisions by the health care team.

It can be so morally distressing... You don't get a say in it [end of life decisions] at the end of the day, it's up to the parents and the physicians (ID 6).

When I was in the ICU setting, there were so many ethical problems and that was a lot of the reason why I left. It's hard. For me it was hard to go home and sleep after a shift if I knew what I was doing was not in the best interest of the patient...there was never enough support for those situations (ID 88).

3.2.5 Nurses' suggestions for improving the work environment.

At the end of the interview, nurses were asked to consider what changes in the work environment could improve how nurses matter. Nurses discussed how management could improve the culture of the unit and improve nurse mattering when they treated nurses with individual attention and respect.

Our manager was very present on the unit. Very approachable, talked to all the staff, checked in with staff... she was at that morning rounds every day and knew all the patients on the unit (ID 33).

Others discussed the importance of management acknowledging their individual needs and listening to their requests for accommodations.

Partly why the morale is so low on the unit is the management is not really willing to work with you at all for any accommodations that you need. Whether you've been there for a long time, or you've been there for a short time, and it really does sting because I feel like I've put in a lot [of time] (ID 06).

Sometimes I get frustrated in my role... I can speak my opinion, but then there's no action...I don't necessarily feel supported (ID 88).

Nurses highlighted organizational committees and positions on shared governance as important avenues for nurses to share their concerns and make decisions that impacted their roles.

I think that in general there could be a lot more [opportunities], if nurses could just have more say, and I just love when I see that nurses speak up... they have such good ideas. And I love to see that coming into fruition, making changes and speaking up (ID 73).

Many of the nurses discussed the importance of recognition and appreciation, however, they reflected that many of the hospital-wide appreciation efforts fall short of increasing their mattering. Nurses argued that meaningful recognition and appreciation was personal.

I think just more maybe individual recognition, which we try to do... we've been doing like a "shift shout out" you know, like, "Brandon did a great job today he had to discharge three patients." Or you know, like "Yvonne had a really heavy load and she did great" (ID 33).

Nurses recommended that nurse managers be more present and approachable on the units. It was important to them that they felt supported by their managers during difficult moments at work.

[We need] just to feel supported. But meaningful support not like they got a grant to help us raise nurse morale and fight burnout and they brought people to all the floors to pass out scented lotions...they have a once weekly yoga class that made to nine in the morning but guess what, there's not a nurse that I know that can get away at nine in the morning... take some of that money and hire some help, or training for the staff... I want to ask these people like have you ever worked on a floor? (ID 82).

Finally, nurses argued that it was important that nurse managers understand the role of their nurses and have the bedside experience necessary to provide meaningful support to their staff.

One big problem we have with our management is that a lot of our managers have been away from the bedside for years... They make policies and have these unrealistic expectations... They are out of touch with the reality of achieving those things (ID 34).

Table 2: Qualitative codes and themes

Theme: Code:	Exemplar quote	Nurses' suggestions for improving nurse mattering	Exemplar quote	Workplace changes or interventions
Mattering as an individual		Individual attention and respect		
Just a number	<i>I'm just a number to fill in. Like, 'Oh, we have to have this nurse because they can open three beds upstairs' (ID 68).</i>		<i>I have picked up a lot of extra shifts, when we're short, and that kind of thing. And one situation in particular. When I did that a manager that I like never see came to me and thanked me herself personally, and that really made me feel like I mattered (ID 34).</i>	<ul style="list-style-type: none"> • Increased time leaders spend interacting and getting to know their staff individually • Scheduled check-ins with between leadership and staff members • Leadership attendance during shift change huddles • Fairness and accountability with scheduling • Required training for nurse leaders in interpersonal relationships, communication skills, and authentic leadership
Knowing names	<i>Don't get me wrong. I understand that we're a very large unit... but they didn't learn my name until like maybe a year or two ago (ID 06).</i>		<i>Just knowing people's names. If you know someone's name...they feel more comfortable being approached for a different topic. (ID 16).</i>	
Lack of accommodations	<i>I am a person and like I do have a life outside of this and things that matter besides my job and it just doesn't seem like that matters to them (ID 6).</i>		<i>I have a really good manager. She's a nurse's nurse. She really is wonderful. And she is all about that life-work balance. She really</i>	

understands that family has to come first and that you know, as long as you're open with her and let her know what's going on, she will work with you in any way that she can which is really great (ID 36).

Having a voice is important for mattering

Improve communication and respond to concerns

Voicing concerns *I raised my voice to directly to the doctor that patient was not ready for discharge... but he didn't listen...I felt like I didn't matter to that doctor. (ID 25).*

[We need] more frequent meetings and more like rounding, not just walking around and saying "Hey, what do you need?" ...sitting down individually would help and talking to people... I just feel like you need to listen to them more and be like, Okay, what's working, what's not working? What can we change? (ID 68).

Change *They walk around once a year with a clipboard and ask us what we need to make our job better and it's the same person every year. And it's and I finally told them last year "Do you all make copies of all this? ... just read what I*

I wrote an email to [name], our president of the hospital, and I tagged all of the high up people. I met with both of them multiple times. And then they actually worked on it and they did what they

- Executive and unit leader rounding on the nursing units
- Multiple avenues for staff to provide feedback or share concerns
- Honest and transparent communication from leadership
- Closed-loop communication from leadership to provide feedback and responses to staff concerns
- Increased opportunities for nurses to join committees
- Increase the scope of shared governance in decision-making
- Require nurse representation on all hospital-level committees

said last year and the year before and the year before that because it's still all very applicable and nothing has changed" (ID 82).

promised... I'm gonna take it as a little win right now (ID 68).

Representative

I feel like I get asked a lot to help or questions. And if anybody has an issue, they might say like, "Well, at the next shared governance, can we talk about this?" ...to have a concern and bring it up and "Okay, that's gonna go on the agenda, and we're all going to talk about it." (ID 33).

So it's pretty amazing because we've gotten things changed through shared governance. And it's all bedside nurses... it was really exciting to see that we talked about it last month and it's fixed this month. (ID 73).

Recognition and appreciation support mattering

Making it personal

I think having senior leaders on the unit and even if they don't know who the nurses are. The nurses get a chance to see them and hear them say, "Thank you, we appreciate you. You guys do a great job for us." That's a lot more personal than an email (ID 63).

Make it personal and meaningful

We've been doing a lot better now with our new hires. They sent a little personal questionnaire, "What are three things you like to do? What kind of candy or chips do you like and where would you want to gift card to?" And they keep that so when someone gets nominated for an award, they get something

- Collect staff preferences for meaningful recognition
- Provide multiple avenues for meaningful recognition
- Increase leadership support of and participation in formal award programs (DAISY, Bravo, etc.)

Making it
meaningful

I do hear that people don't feel as connected with my manager... particularly a lot of other night shifters...they don't see her so there's a disconnect there, but she does do things you know, like, set up a spa room for a week... she does things like that I think people feel grateful for, but I don't know if it feels as meaningful to them or if they feel valued with that (ID 36).

Recognize
difficult work

What the staff really want is just an acknowledgement. Tell us that you realize that supplementing us with floats is a problem... make the core staff feel like that they are valued and that they [administration] recognize that we are carrying the weight of the whole unit (ID 94).

personal to hand out (ID 12).

You see all those memes like "You're overworked, underpaid. Let's give them pizza." You know, it doesn't always back things up. But when you've got the right staffing, when you're focusing on things like education, when you're making sure people have time to do their education, or you're reimbursing them for certifications, [that is meaningful] (ID 63).

I think my manager is really good about just telling me like, "I don't know how you're managing to do this, but I appreciate you... so that has made me feel really, really good and seeing that the work I'm doing is actually seen and not I'm just not doing it for nothing (ID 36).

- Consider timeliness and appropriateness of celebrations and acts of appreciation with what is occurring on the unit
- Ensure the unit's needs are met regarding safe staffing and resources prior to providing acts of appreciation
- Increase leadership's presence on the unit
- Provide transparency and accountability in leadership's advocacy for the unit

Attending to well-being is essential for mattering**More support and involvement from management****Safety**

They have had 28 violent situations on the psych unit at [name of hospital] since March. That's hard... they have these meetings and stuff really is not getting better, no change is happening (ID 73).

That's the biggest thing is the safety. My manager is really into making sure that we're safe, so she makes sure as a charge nurse, that we don't have a patient load if we don't have to. And basically it's the reason is that we can make sure we check up on all the other nurses and all the other staff to make sure that they're running safely (ID 47).

- Prioritize nurse safety
- Immediately address acts of violence against nurses
- Develop no-tolerance policies regarding violence against nurses
- Re-evaluate nurse-to-patient ratios
- Prioritize adequate staffing as a necessity for patient and staff safety
- Provide support and guidance for staff during morally distressing situations
- Provide resources and training to staff to proactively address ethical dilemmas
- Address conflict, horizontal violence, and incivility on the unit before it becomes toxic
- Required training for nurse leaders in conflict resolution

Staffing

The morale is hard. It's getting difficult, I think especially for the ones of us who have stuck around... I look around and every nurse is either like a new grad or a traveler (ID 6).

Our nursing ratios are amazing. And I strongly believe that that is 100% her doing. She fights to make sure that we have the staff that we need... She's always, always there (ID 54).

Moral distress

Anyway, the man did wind up dying and he was in restraints when he died so it automatically made it a coroner's case and that was

We have an Ethics committee that takes it very seriously... It's a whole bunch of different people, nurses, physicians that get

horrible. But I didn't know who [else to ask] ... I had gone all the way up to the top and nobody helped... I didn't know what to do (ID 82).

Toxic work
culture

I did my practicum in the CVICU and originally started there as a new grad after graduation. I left after two months, just because I just felt like I wasn't supported. I felt the work environment was very toxic, which is why I left. My preceptor wasn't supportive, wasn't willing to teach me, and my manager wasn't the most supportive. So I left and then ended up going to a different hospital to work as a new grad (ID 91).

together... when there's a consult needed and they make decisions. So yeah, we're supported incredibly when it comes to ethics (ID 47).

[Before] there was a really bad culture for nursing. There have been significant changes... since [name of CNO] took over. And I think that's why you feel like you matter... she really does believe it. It's not just like, "Oh, you matter!" It's not words, it's truth to her, and she means it with her whole heart, and she'll go to the ends of the world to see that that happens, and if it can't happen she'll come back with a really good reason of why it can't (ID 73)

DISCUSSION

Acute and critical care nurses identified aspects of the work environment that influenced how they mattered at work. Qualitative themes and participants' suggestions for improvement were used to make recommendations for potential workplace strategies and interventions that may increase nurses' perceptions of mattering (see Table 2).

Many nurses felt like they were not valued as individuals at work but instead felt like they were "just a number" and easily replaceable. However, when hospital and nursing leadership treated them with individual respect and attention, they felt that they mattered. Maslach and colleagues (1985) identified the concept of individuation as the feeling that one is valued as a unique individual. Flett (2018) argued that people need personal and meaningful indications in life from "someone who gets us" that they matter as an individual (p. 33). Nurse leaders can enhance nurses' perceptions of mattering as an individual through personal attention and demonstrations of respect. Spending quality time with nurses during one-on-one check-ins, staff meetings, and shift change huddles can build rapport and establish relationships between nurse leaders and their staff. In the seminal report, *Taking Action Against Clinical Burnout*, the National Academies of Science, Engineering, and Medicine (2019) found that professional relationships between clinicians and management were important for empowering staff, building trust, increasing job satisfaction, and decreasing burnout. Likewise, López-Ibort et al. (2022) reported that high-quality relationships between nurses and nursing leadership were associated with positive workplace behaviors such as civility, teamwork, and loyalty as well as improved morale. Based on these findings, they recommended that leaders' performance should be evaluated based on these relationships (López-Ibort et al., 2022).

Nurses felt they mattered when their voices were heard. They shared several ways they were empowered to use their voice at work including unit and hospital level committees, shared

governance, educator roles, and meetings with hospital administration. Nurses discussed nursing leadership's role in elevating nurses' voices and argued that clear and frequent communication between leadership and their staff could lead to increased mattering. In order to improve communication with nurses, leaders need to increase opportunities and methods for staff to provide feedback and voice concerns. Wei and colleagues (2018) reported that healthy work environments are enabled when effective two-way communication is encouraged, and staff are empowered to be involved and make decisions. Choi et al. (2022) found that nurse manager competencies of team communication and collaboration were significantly predictive of job satisfaction and turnover intention. These competencies included respecting others' views, listening to colleagues, establishing trusting relationships, and incorporating multiple perspectives (Choi et al., 2022). Furthermore, skilled communication and true collaboration are two of the American Association of Critical-Care Nurses' (AACN, 2016) standards of healthy work environments. Health care organizations are encouraged to prioritize respectful communication, empower nurses to speak with authority according to their knowledge, and to facilitate true collaboration based on trust, shared responsibility, and respect (AACN, 2016).

Nurses shared that when hospital administration and nurse leaders recognized their work and gave them personalized acts of appreciation, they felt that they mattered. Nurse leaders must convey to nurses that they are valuable members of the health care work environment and that their needs matter in order to support nurse mattering. Meaningful recognition, defined by the AACN as recognizing the value and meaning of an individuals' contributions to an organization, is considered a fundamental human need and requirement for professional development (AACN, 2016). Recognition that is not personalized, meaningful, nor delivered at an appropriate time may be viewed by nurses as "disrespectful tokenism" (AACN, 2016, p. 29). Nurses in this study

noted that many hospital-sponsored appreciation events did not reach the heart and soul of nurses. When Salvant and colleagues (2020) gathered meaningful recognition preferences of nurses they found that salary increases according to performance and paid leave to attend continuing education workshops were rated the highest. They also reported an interesting contradiction between what nurse leaders perceived were the most valued forms of recognition for their staff, incorrectly assuming staff preferred celebrations for years of service and public posting of patient evaluations (Salvant et al., 2020). Kelly and colleagues (2021) found that meaningful recognition was a negative predictor of nursing burnout but a positive predictor of compassion satisfaction. While formal recognition programs such as DAISY Awards are associated with increased satisfaction, nurse managers are encouraged to seek out recognition strategies that are valued individually by their staff (Kelly et al., 2021). Nurse managers should utilize multiple methods of recognition and acts of appreciation to demonstrate their nurses matter.

Finally, nurses discussed the important link between mattering and well-being. Nurses shared they often felt that their safety and the safety of their coworkers and patients did not matter to hospital administration when they were forced to work in unsafe staffing and under resourced situations. Nurses viewed meaningful administrative support as safe patient-to-staff-ratios, adequately trained staff, guidance during moral distress, and efforts to improve work culture. Nurses recommended that nurse managers should have recent bedside experience and understand the complexities of the work their nurses complete. Kurtosis and colleagues (2017) found that supervisor support and organizational resources were strongly related to perceived organizational support. Supervisors are often viewed as representatives of the organization and perceived as acting on its behalf, therefore supervisor support has a powerful impact on how

employees feel their well-being is valued (Kurtessis et al., 2017). Authentic leadership is defined as a “pattern of transparent and ethical leader behavior that encourages openness in sharing information needed to make decisions while accepting input from those who follow (Avolio et al., 2009, p. 423). The AACN (2016) lists authentic leadership as key component of a healthy work environment and an essential for nursing retention. Nurse leaders have high impact roles where they influence organizational decisions and practice environments and therefore they must be skilled in communication, role models of collaboration, and facilitators of positive change (AACN, 2016). Wei and colleagues (2018) reported nursing leadership as a significant component of a healthy work environment, and a strong influence on nurse and patient satisfaction, safe work environments, and quality patient care.

LIMITATIONS

This study was the first to explore how work environment factors influence nurses’ perceptions of mattering, but it is not without limitations. Nurses were able to self-enroll in the study and their responses were subjective which could have led to bias. The sample size included 22 nurses from 8 different states, but the findings are not generalizable to all nurses practicing in acute and critical care units in the United States. The recommendations for workplace changes and possible interventions were based on the qualitative themes and statements shared by the nurses in the sample. Further research is necessary to determine the effectiveness of these recommendations on enhancing nurses’ perceptions of mattering.

FUTURE RESEARCH

Future research on mattering within the health care work environment should include more voices and experiences of mattering, including the perspectives of nurse leaders. Barriers that can prevent nurses from feeling they matter at work should be identified. To date there have not been any mattering interventions developed in any discipline (Flett, 2018). Exploratory

studies are necessary to develop interventions that improve nurse mattering as well interventional studies that measure the impact of increased mattering on nursing indicators such as autonomy, engagement, burnout, and well-being. System-level interventions to increase nurse mattering may also impact organization indicators such as employee satisfaction and turnover and should be explored empirically, as well.

CONCLUSION

Mattering at work is an essential part of a healthy work environment that attends to nurse well-being and psychological health. Nurses identified aspects of the health care work environment that impact their perceptions of mattering. Addressing these work environment elements may cause nurses to feel that they are valued members of the health care organization and lead to improvements in nursing burnout and turnover.

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Chapter 5: Conclusions

There are over 4.3 million registered nurses in the U.S., making nurses the largest group of health care workers (American Association of Colleges of Nursing, 2019; American Nurses Association, 2022). Nurses are the glue of the health care system, connecting patients, families, health care providers, and the organization (Peter & Liaschenko, 2003). Consistently ranked the most trusted profession by the public (Brenan & Jones, 2024) and recently lauded by the media as heroes during the COVID-19 pandemic (Mohammed et al., 2021), a recent report by the American Nurses Foundation (2021) found that nurses feel that they do not matter to their institutions and supervisors.

The U.S. Surgeon General listed mattering as an essential part of a healthy work environment (U.S. Surgeon General, 2022). This dissertation study posited that mattering is also essential for nurses' well-being. When nurses feel they are valued by others and add value at work, their mattering increases along with their job satisfaction, engagement, and intent to stay in their job (Haizlip et al., 2020a). There is a gap in the literature, however, that prevents nurse researchers, leaders, and educators from incorporating mattering into the field. There are no studies that examine how nurses perceive they matter at work, nor are there any examinations of how the health care work environment influences nurses' perceptions of mattering.

To address these gaps and to explore mattering as a nurse within the health care work environment, a convergent, mixed-method dissertation study was conducted with the following aims: 1) Evaluate levels of nurse mattering and ethical climates within the health care work environment, 2) Describe the role of the health care work environment (work characteristics, ethical climate) in nurses' experiences of mattering, and 3) Integrate experiences of nurse mattering in the health care work environment with outcomes of the WMS and HECS

measurements. The study was divided into three individual, but related manuscripts that addressed these aims.

SUMMARY OF FINDINGS

The first manuscript detailed a systematic scoping review conducted to address the following objectives: 1) systematically search and synthesize the literature on mattering at work, 2) identify key concepts and measurement methods of mattering within the context of work and 3) examine how mattering has been incorporated into work environments. The analysis of the final 32 empirical studies resulted in a detailed overview of what influences employees' perceptions of mattering at work. Work itself is a sense of pride and meaning for adults, and employees feel they matter when their work is important and respected by others (Jung & Heppner, 2017; Richards et al., 2019; Schieman & Taylor, 2001). Work consists of social interactions and interpersonal relationships that shape employees' experiences of mattering (Blustein, 2011; Froidevaux et al., 2016; Richards et al., 2018). Coworkers play a big role in expressions of mattering through support and camaraderie (Haizlip et al., 2020b; Zeijen et al., 2023). Administrators' behaviors can also impact how their employees perceive they matter to the organization (Reece et al., 2021; Soral et al., 2022). Overall, the scoping review provided evidence that mattering is important for employee meaning, engagement, self-efficacy, satisfaction, and well-being.

The second manuscript described the convergent, parallel mixed-method study that explored how nurses matter within the health care work environment and the impact of the hospital ethical climate on mattering. Quantitative data were collected through an online survey that gathered nurses' demographics, workplace characteristics, and administered a validated instrument to measure mattering at work and the hospital ethical climate. Two hundred and forty-

three nurses met inclusion criteria and completed surveys. Twenty-two of the sample agreed to participate further in individual interviews. Separate data analysis was conducted for each of the methods of data collection and then results were integrated together. Overall, the study found several relationships between the work environment and nurse mattering, including race, nursing certification, hospital size, labor unions, and formal awards programs. Nurses provided detailed perspectives of how they mattered at work. Support and resources, nursing leadership, patient care, interprofessional relationships, and physician collaboration were listed as essential elements for ensuring nurses mattered. Integrated findings demonstrated a strong relationship between the hospital ethical climate and nurses' perceptions of mattering. When hospitals are viewed as ethical environments that provide adequate support, clear communication, respect, ethical patient care, teamwork, and collaboration by nurses, they are more likely to have higher levels of mattering.

The final manuscript identified what aspects of the work environment influence nurses' perceptions of mattering. A secondary data analysis deductively examined qualitative themes from the second manuscript. Nurses gave examples of workplace experiences that both positively and negatively impacted how they felt they mattered, and they gave suggestions for how mattering can be enhanced at work. Nurses discussed the importance of feeling valued as an individual and not just for the role they fulfill. It was important that nurses had multiple avenues for voicing their concerns and leadership who took action based on these concerns. Meaningful and personal demonstrations of recognition and appreciation enhanced nurses' perceptions of mattering, as did efforts to attend to nurses' safety and well-being. Recommendations for workplace changes to enhance nurse mattering were made based on these themes and recommendations.

NURSING IMPLICATIONS

Mattering is just as relevant to the health care work environment as any other workplace. It is essential that nurses not only matter to their patients, but also to their peers, colleagues, and the health care organization (Epstein et al., 2020). Burnout has grown into a mental health crisis for all health care workers (Dzau et al., 2018), and nurses continue to experience the negative effects of burnout and toxic work environments (Aiken et al., 2023; Shah et al., 2021). The literature on mattering is clear, it is an essential psychological condition for human thriving and flourishing (Prilleltensky, 2020; Rosenberg & McCullough, 1981). Health care administrators and nurse leaders must take action now to evaluate nurses' levels of mattering within the organization and take steps to improve how nurses feel they are valued and able to add value at work.

FUTURE RESEARCH

This dissertation study not only uncovered the importance and relevance of mattering for nurses, but also reported several ways that mattering can be attended to in the work environment. Future research should take these recommendations for improving nurse mattering and develop workplace interventions that can be implemented by administrators and nurse leaders. Future research should also build on the findings of this dissertation study to examine the relationship of mattering and racial disparities in order to develop more equitable workplaces. Studies are needed to elucidate the intricate relationships between mattering and other key workplace variables such as resilience, job satisfaction, wellness, stress, self-efficacy, and moral courage through structured equation modeling.

There are many studies on the importance of healthy work environments but very few empirical studies that demonstrate the effectiveness of interventions to improve these environments. Interventions to improve nurse mattering need to be piloted in health care work

environments and effects need to be measured. There are several validated instruments for measuring mattering, however none of them were developed specifically to address the needs of health care workers. Future studies should broaden the identification of unique factors that influence health care workers' perceptions of mattering in order to develop an instrument that can be implemented for this specific population. In this way, individualized interventions for health care workers' perceptions of mattering can be adequately measured and outcomes analyzed. Further research is also necessary to understand the impact of mattering on other facets of the health care work environment, including patient outcomes, turnover, and other quality indicators.

STRENGTHS AND LIMITATIONS

This dissertation provided a detailed perspective on how mattering is experienced by nurses within the health care work environment. The convergent, parallel mixed-method design was a strong method of data collection that enabled findings to be triangulated and integrated (Creswell & Plano Clark, 2018). This method brought together the weaknesses and strengths of both quantitative and qualitative methods to answer the research question of how nurses matter within the health care work environment (Creswell & Plano Clark, 2018).

There may have been sampling bias due to the fact participants could self-enroll and all data collection relied on self-report. While the mixed-method study had a moderate sample size of participants (n=243) from 37 different states across the U.S., the findings are not generalizable to all U.S. nurses. Coding reliability thematic analysis enabled accountability and consistency of coding with a qualitative researcher separate from the study. Peer review by an expert panel of mattering and qualitative researchers provided further oversight of the thematic analysis process.

Finally, the recommendations for workplace changes and possible interventions were based on the qualitative themes and statements shared by the nurses in the sample. Further research is necessary to determine the effectiveness of these recommendations on enhancing nurses' perceptions of mattering.

CONCLUSION

The feeling that one matters at work is essential for nurse well-being. Through mattering nurses are connected to the meaning of work, relationships with others, and their impact in society. While the presence of mattering leads to enhanced engagement, belonging, resilience, and job satisfaction, the absence of mattering can lead to burnout, turnover, and depression. Mattering is an essential part of a healthy work environment. Nurses identified facets of the health care work environment that influenced how they felt valued as well as ways that they were able to add value. Health care organizations have a responsibility to address the well-being of their nurses and take steps to enhance perceptions of mattering within the health care work environment. Addressing these work environment elements may cause nurses to feel that they are valued members of the health care organization and lead to improvements in nursing burnout, turnover, and well-being.

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“The Road goes ever on and on
Down from the door where it began.
Now far ahead the Road has gone,
And I must follow, if I can,
Pursuing it with eager feet,
Until it joins some larger way
Where many paths and errands meet.
And whither then? I cannot say.”
— J.R.R. Tolkien, *The Fellowship of the Ring*