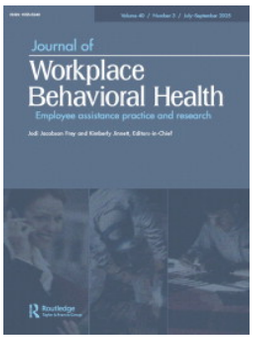

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"My voice does not matter … " a qualitative analysis of clinician experiences with psychological safety, the work environment, and burnout

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ABSTRACT

Clinician burnout remains prevalent, exacerbated by factors such as inadequate staffing, a lack of organizational support, devaluation, and poor interpersonal relations. Amidst provider shortages, the nurse practitioner (NP) workforce is expanding, paralleling high rates of burnout. This study, conducted from September to November 2022 with 17 California-based NPs, utilized a qualitative descriptive approach within a social ecological framework to examine NP experiences concerning burnout and psychological safety. Six themes were found: Burnout is dread, Illusion of autonomy, No voice. No value., Lacking psychological safety, Lost vocation, and Finding solutions. Results indicate that NPs experiencing burnout feel marginalized within hierarchical work environments, constrained by institutional practices, and fearful of voicing concerns. Conversely, NPs without burnout report having a significant voice and actively shaping their roles by advocating for autonomy. Opportunities for policy and practice improvements are discussed, including promoting NP autonomy, fostering a culture where all voices are valued, and recognizing burnout as a quality indicator beneficial for all members of the healthcare system.

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KEYWORDS
Burnout; workforce; professional autonomy; psychological safety; work environment; social ecology

Clinician burnout is unremitting and largely attributed to challenges in the work environment including feeling devalued, lack of autonomy, inadequate staffing, and low psychological safety. While burnout has been extensively studied across various healthcare professions, the unique regulatory and

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hierarchical challenges faced by nurse practitioners (NP), particularly in states like California, provide a distinct context that has not been fully explored. NPs, unlike their physician counterparts, often operate under restrictive scope of practice (SOP) regulations that can limit their autonomy and exacerbate workplace stressors. This study addresses this gap by focusing specifically on NPs in California, examining how SOP restrictions and hierarchical work environments influence both psychological safety and burnout in ways that may differ from other healthcare providers.

In the United States, NPs are advanced practice nurses with specialty training and board certification enabling them to diagnose, prescribe, and treat illnesses across settings. Their clinical care and patient outcomes are comparable to physicians, and associated with decreased hospital admissions, ER visits, and annual Medicare cost savings (Buerhaus et al., 2018). NPs play a vital role in addressing the national shortage of primary care providers, ~70% of all NPs deliver primary care, particularly in underserved communities (American Association of Nurse Practitioners, 2023).

The NP workforce has increased 4-fold from 91,000 in 2010 to 385,000 in 2023 (American Association of Nurse Practitioners, 2023), and is projected to grow an additional 40% in the next decade (U.S. Bureau of Labor Statistics, 2023). This is in response to the growing demand for healthcare providers, however with high rates of burnout, workforce retention, and stability is a concern (Prasad et al., 2021). Many NPs experience exhaustion and fewer than half feel supported in their work environment, receive positive recognition from a supervisor, or believe their employer values their mental health (American Nurses Association Enterprise, 2021). NP burnout is associated with a negative work environment (Schlak et al., 2022), lack of organizational support (Poghosyan et al., 2020), feeling de-valued (Haizlip et al., 2020), and increased intent to leave (Bourdeanu et al., 2020). Furthermore, in practices where NP burnout was high, patients were more likely to use the emergency services and be hospitalized, in comparison to those with low burnout (Poghosyan et al., 2023).

Nurse Practitioner (NP) practice environments vary by state due to the scope of practice laws: 27 states allow independent practice, 12 have reduced practice, and 11 enforce restricted practice (American Association of Nurse Practitioners, 2024). In states with independent practice, NPs operate under their own license, while those in reduced and restricted states require varying levels of physician supervision. In California, a collaborative agreement with a physician is required for NP practice. Additionally, NPs face national restrictions from federal Medicare laws (Centers for Medicare Medicaid Services, 2022), organizational policies, and supervising physicians (Winter et al., 2021). A study in California showed that while 60% of NPs use their full skills, about 58% experience

hierarchical challenges, and 50% lack sufficient support in their roles (Spetz et al., 2018).

Although independent SOP laws are linked with improved work environments for NPs (Poghosyan et al., 2021), recent research indicates no direct correlation between such laws and lower levels of burnout (O'Connor et al., 2023). A potential explanation for this finding is the incongruence between NP SOP independence and workplace autonomy. While SOP is determined by state laws, NP practice autonomy is influenced by local rules and regulations set by organizations or a physician supervisor (Schorn et al., 2022). Autonomy, conceptualized as a form of power in the workplace, may or may not be afforded to NPs by administrators and physician supervisors (de Lisser, Dietrich, et al., 2024; de Lisser, Lauderdale, et al., 2024). These hierarchical structures, such as physician supervision, standardized procedures, and co-signature, are essential for enforcing SOP restrictions. However, such restrictions can create oppressive occupational norms by establishing distinct social hierarchies where NPs are subordinate to rather than collaborative with physicians (Arcaya et al., 2015). Social hierarchies are needed on healthcare teams to ensure patient safety and accountability, yet they may have a disproportionately negative impact on NPs due to state and federal SOP restrictions, variations in practice autonomy, and interpersonal relations with physicians and practice leadership (Thompson & McNamara, 2022). The nuanced implications of these regulatory and hierarchical obstacles on NPs are not sufficiently explored in the broader discourse on healthcare burnout, which often homogenizes experiences across different professional categories without accounting for such intricacies.

Furthermore, the concept of psychological safety, while extensively studied, has not been sufficiently examined from the perspective of NPs facing unique workplace challenges. Psychological safety is defined by Edmondson (1999) as the perception that the work environment is safe for interpersonal risk taking behaviors, such as speaking up, sharing ideas, and reporting errors without fear of reprisal, and is crucial for effective team performance. Recent research underscores its inverse relationship with burnout (de Lisser, Dietrich, et al., 2024; Sherf et al., 2021; Zhou & Chen, 2021) and its critical role in promoting institutional outcomes, team performance, and patient safety (Edmondson & Bransby, 2023; O'Donovan & McAuliffe, 2020). However, existing literature often overlooks how hierarchical structures specific to NPs, such as physician supervision and administrative policies, might uniquely impact their experiences of psychological safety. This oversight persists despite evidence that hierarchy and loss of autonomy are significant barriers to psychological safety (Remtulla

et al., 2021; Voogt et al., 2020; Zhou & Chen, 2021) and are prominently featured in NP work environments.

This study, therefore, seeks to fill these crucial gaps by focusing specifically on the lived experiences of NPs in California, examining how SOP restrictions and hierarchical work environments influence their perceptions of burnout and psychological safety. By adopting a qualitative descriptive approach, this research aims to provide nuanced insights that could inform targeted interventions to improve NP work environments, thereby enhancing their well-being and the quality of care they provide. This exploration is particularly timely given the projected growth of the NP workforce and the evolving healthcare needs of the U.S. population.

Theoretical framework

The social ecology of burnout

The Social Ecology of Burnout (SEB), a framework specifically developed for researching nurse practitioner (NP) experiences (de Lisser, Dietrich, et al., 2024), informs the design and analysis of this qualitative descriptive study. This framework extends the traditional socio-ecological models, which view human behavior and developmental processes as dynamically interwoven within varied social and cultural environments (Bronfenbrenner, 1979). SEB specifically contextualizes NP burnout within the broader healthcare environment, emphasizing the transactional nature of interactions between NPs and their multifaceted work contexts (McLaren & Hawe, 2005).

While traditional burnout research often focuses on individual or immediate work environment factors, the SEB framework encourages a broader examination across multiple ecological levels. Studies often concentrate on personal stress management or organizational culture (Maslach & Leiter, 2016, 2017), potentially overlooking how broader institutional and policy contexts influence NP experiences. This study aims to bridge this gap by applying SEB to examine how systemic factors at various levels interplay to affect NP burnout and psychological safety.

Applying the SEB framework

Intrapersonal factors

At the core of SEB, we sought to understand the intrapersonal experiences of burnout among NPs, exploring how they perceive and internalize burnout. Traditional definitions describe burnout in terms of emotional exhaustion and depersonalization (Maslach et al., 1996); however, this study

expands this understanding by exploring how NPs' self-concepts and professional identities are shaped by broader ecological influences.

Interpersonal processes

SEB considers the critical role of interpersonal relationships within healthcare settings. While Rathert et al. (2020) highlight the importance of a caring work environment to promote psychological safety and mitigate burnout, our study probes deeper into how NP perceptions of hierarchical dynamics within healthcare teams impact these relationships, potentially exacerbating NP burnout. We explore how psychological safety, or the lack thereof, influences participants' experiences with burnout.

Institutional factors

The framework examines institutional structures that directly impact NPs, such as leadership styles, practice autonomy, operational policies, and resource allocation. Aiken et al. (2023) identified institutional factors associated with burnout including lack of patient safety, poor work environment, and a lack of confidence in management. This research critically assesses how institutional factors contribute to or mitigate burnout.

Policy level

SEB underscores the influence of state and federal SOP policies on NP burnout. Existing literature, such as O'Connor et al. (2023) discusses the negative impact of independent SOP on burnout; our study extends this by examining how these policies affect NPs' perception of burnout and psychological safety, situating these insights within the broader social and regulatory frameworks.

By employing the SEB framework, this study critically examines factors associated with burnout and psychological safety. It aims to expand upon the existing literature, by uncovering nuanced ways in which various ecological levels collectively shape the burnout experiences of NPs, offering insights that can inform more holistic and effective interventions.

Methods

Context

This qualitative study was conducted in late 2022, as California was enacting a law that would create a pathway to independent scope of practice (SOP) for NPs (January 2023). Participants for this study were recruited from a sample that participated in a larger statewide workforce study entitled, *Survey of California Nurse Practitioners and Nurse Midwives* (Joynt

et al., 2024), which aimed to collect baseline workforce data before enactment of the law. The study was approved by the University of California San Francisco (IRB#22-36261) and Vanderbilt University Institutional Review Boards (IRB#221600).

Methodology

A constructivist paradigm (Creswell et al., 2006) informed the design of this qualitative descriptive study, using semi-structured interviews and naturalistic inquiry (Colorafi & Evans, 2016) to elicit narrative stories and perceptions of study concepts. Staying true to the qualitative descriptive methodology, we sought to capture participant descriptions and experiences in their day to day life at work (Sandelowski, 2000), using the SEB framework as a guide for the research design. The primary researcher (RD) has prior experience with qualitative research, conducted all interviews, and was mentored by senior qualitative researchers (JL, DPS). RD is an expert psychiatric nurse practitioner (NP) working in California, an NP educator, and has experienced burnout. Thus, reflexivity and positionality in the research informed our iterative approach to study design and data analysis. Researcher bias was addressed by journaling, critical reflection, and senior research mentorship.

Sample and setting

A random sample of NPs was selected from the CA Board of Registered Nursing public database to participate in the *Survey of California Nurse Practitioners and Nurse Midwives*. NPs who completed the web-based version of the survey and indicated a willingness to be interviewed were recruited between July 2022 and October 2022. NPs who completed paper-based surveys were not considered due to the timing of paper survey processing. Inclusion criteria included being employed as an NP in CA at least 20 h per week and the ability to participate in a 60-min audio-recorded interview in English. Potential participants were excluded if they reported a history of an acute mental crisis in the past 12 months, defined by emergency, in-patient, or intensive outpatient treatment for a mental crisis, or if legal proceedings with current employer were pending or ongoing.

Participants were recruited by email invitation and an IRB-approved study information sheet was shared. Participants who agreed were called, study aims were reviewed, and verbal consent to participate was confirmed. Participants were then screened for eligibility and an interview was scheduled. Participants were recruited in two rounds, in the first round, all NPs who completed the online survey in July and August 2022 were recruited

and interviewed. In the second round, a purposive sample was drawn from the additional surveys completed between September and October 2022. Purposive sampling was used in the second round to ensure the representation of California NP demographics by age, practice location, and setting (Spetz et al., 2018). While burnout status was not an inclusion criterion, we sought to hear from NPs who reported burnout and who did not report burnout on the survey. This was accomplished by generating burnout scores from the survey using the emotional exhaustion (EE) subscale of the Maslach Burnout Inventory (range 0–63) with burnout defined by a score of 26 or greater (Maslach et al., 1996).

Data collection

A semi-structured interview guide was developed including six questions with added prompts. The interview guide was piloted using a structured cognitive testing protocol with three potential future study participants and four content experts to assess comprehension, retrieval, decision, and response processes (Willis, 1999). The interview guide was well received during pilot interviews and only minor changes to question wording and order were made (see Supplementary Appendix Table 1 for interview questions). After pilot testing, interviews were conducted using a university encrypted teleconference platform. Before initiating audio-recording, study aims and safeguards were reviewed and informed consent was obtained. Interviews were then audio-recorded and transcribed. Transcriptions were reviewed for accuracy by reading and listening to the interviews. After de-identification, transcripts were shared with participants for member checking. Data collection continued until saturation was reached, defined by the presence of repeated themes shared by participants, resulting in both thematic saturation and researcher understanding of the concepts (Hennink et al., 2017).

Data analysis

Our data analysis followed the structured steps outlined by Colorafi and Evans (2016), with a detailed focus on first and second order coding, development of higher order themes, and ensuring the reliability and validity of our findings. *Development of an Initial Codebook.* The initial codebook was developed based on the Social Ecology of Burnout (SEB) framework, a thorough review of the relevant literature, and RD's personal expertise and knowledge of the field. This codebook served as the foundational tool for identifying themes and patterns within the data. *First Order Coding.* In the first round of coding, RD and JL independently reviewed and coded two

transcripts to apply the initial codes. This stage focused on identifying basic elements directly from the data that were relevant to our inquiry. Each transcript was annotated with margin notes and significant text was highlighted to facilitate deeper analysis. *Second Order Coding.* After initial coding, a second round of coding led by RD with two research assistants from the University qualitative research core was conducted, using the same transcripts. Additional codes were added, and discrepancies and observations were discussed. This iterative process aimed to synthesize and abstract the first order codes into more comprehensive categories, capturing broader themes within the data. This stage involved iterative discussions to challenge and refine each other's understanding of the data. Codes were then refined by adjusting and merging codes where necessary to better represent the data insights. *Development of the Final Codebook*. Utilizing insights gained from first and second order coding, a final codebook was compiled. This codebook was rigorously aligned with the nuances of participant descriptions and the theoretical framework underpinning the study. *Ensuring Reliability and Validity.* To establish inter-rater reliability, RD and two research assistants independently coded two new interviews using the final codebook. Codes were then compared, and discrepancies were resolved through consensus, ensuring consistent application of the codebook. Validity was addressed through methodological reflexivity, peer debriefing, and maintaining an audit trail detailing through the coding process and decision-making throughout the study (Kahlke, 2014). *Higher Order Theme Development.* With the finalized codebook, the remaining interviews were coded by RD and the research assistants. Codes and associated quotations were assessed for parallel likeness and grouped into clusters based on similarity and contextual relevance (Sandelowski, 2011). From these clusters, categories were formed and checked against the coded data to ensure accuracy. RD and JL then engaged in a series of iterative meetings to distill these categories into final themes and sub-themes, focusing on how these themes interconnected and related back to the SEB framework. All coding and analyses were conducted using an Excel spreadsheet, which facilitated systematic organization and retrieval of coded data segments. Themes were further defined, and illustrative quotes were carefully chosen to enrich the description of each theme, providing a vivid portrayal of the participants' experiences.

Results

A total of 17 semi-structured NP interviews were conducted. The mean age of participants was 47 years, and they had a range of 1–26 years of experience in practice (mean: 10.3 years). Most participants self-identified as

female ($n = 13$). Participants self-reported racial identities were diverse: White ($n = 9$), Chinese ($n = 2$), Hispanic ($n = 2$), Black-African ($n = 1$), and Filipino ($n = 1$). Clinical certifications included Family NP ($n = 12$), Adult Geriatric Primary Care NP ($n = 3$), and Psychiatric NP ($n = 2$). Participants described their practice settings as located in ambulatory care ($n = 11$), acute in-patient ($n = 5$), and long-term care ($n = 1$). Of the 17 participants, 13 reported providing primary care services; 2 NPs were located in rural towns. Twelve participants had scores indicative of burnout (Maslach Burnout Inventory score ≥ 27).

Themes: Organization and presentation

Data were analyzed and organized from initial codes to final themes and are depicted in Supplementary Appendix Table 2. All participants shared their perspectives on burnout; however, five participants reported low burnout and shared insights into how they actively made changes in their career to manage and prevent burnout. Our analysis confirmed the presence of multidirectional and interdependent layers of influence described in the SEB. However, in staying true to participants' experiences, we do not present the themes in a linear fashion as depicted in the SEB (de Lisser, Lauderdale, et al., 2024), moving from the individual to policy, rather we present the themes as interrelated, touching on multiple levels within the social ecology. Figure 1 depicts the study themes and their associated levels within the social ecology, with two themes outside of the diamond: Finding Solution at the top and Lost Vocation at the bottom. Lastly, in our narrative description of the themes, we tell participants' stories beginning with the individual experience of burnout, their perceptions of the work environment, followed by interpersonal relations at work, and then the resultant perception of lost vocation or solutions to manage burnout.

Theme 1: Burnout is dread

Considering individual intrapersonal experience with burnout, we found that NPs defined burnout using descriptors, such as hopelessness, frustration, irritation, and a sense of dread in going to work. Many participants had difficulty defining burnout and spoke about how they felt. One participant said,

> *"you get to a point where you feel like it's costing you your soul to go to work… it's just a big black hole… and you just get to the point where you're like, I can't give anymore. I have nothing left to give."* NP16-

A culture of burnout is described by this participant, "*I'm burned out. You're burned out. What's the big deal? We just, you know, we're just in a coexisted burnout state*." Another participant shared, "*I wake wondering do I really want to do this*?" Another shared, "*I start crying when I know I*

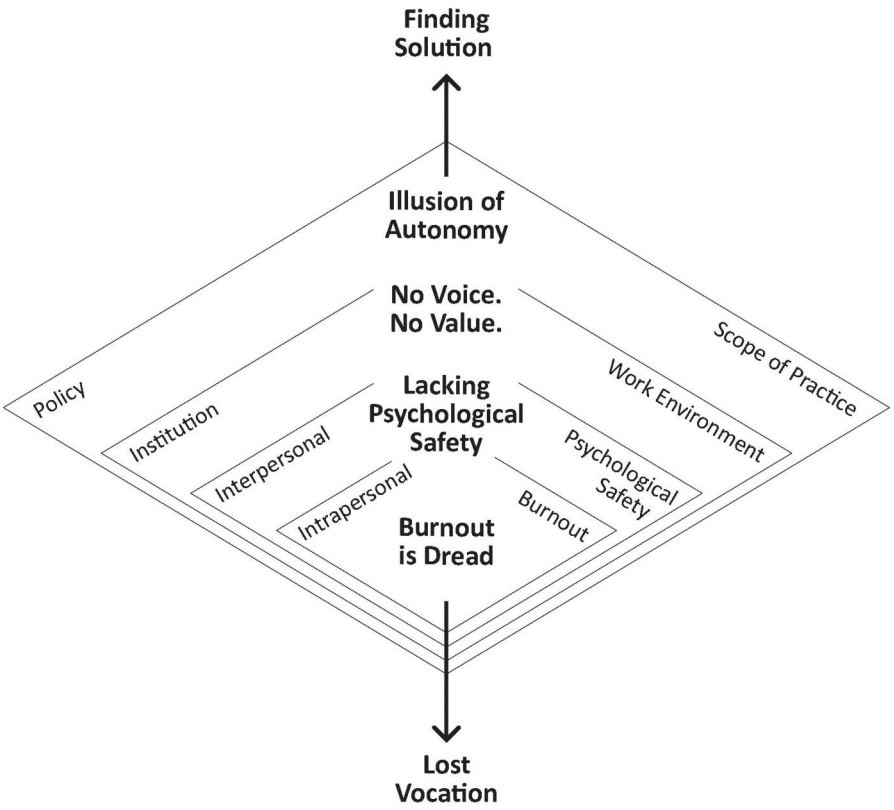

Figure 1. Study themes and their associated level in the social ecology of burnout (de Lisser et al., 2024).

have to go to work." Some provided succinct definitions, and many assumed a stance of acceptance and resignation, "*it is not going to change*."

Theme 2: Illusion of autonomy

As participants spoke about burnout, their experiences were contextualized by structural factors in the work environment, including institutional regulations and SOP policies. Participants described dissatisfaction associated with working in a hierarchy, including experiences of injustice, inequity, and marginalization. These factors contributed to strained interpersonal relations as participants described their experience with hierarchy at work and a perception of unjust, inequitable, and oppressive working conditions. The theme, "*Illusion of autonomy*" describes the experience of being hired into roles to provide care consistent with NP training only to find their practice autonomy narrowed or removed by institutional policy or physician preference:

> "*The frustration… I wasn't being utilized… the physical exams that I spent so much time learning to do … half of my education went down the tubes*." NP5-

While there was diversity in practice settings, participant descriptions of structural factors in the workplace were similar as described in their day-to-day work.

"*Mine (SOP) is limited by the hospital… our (NP) team doesn't write orders… I'm not allowed to prescribe at work… we have to reach out to a physician, sometimes there is a delay in which physical safety was at risk for the patient and for staff.*" NP7-

"*The people determining our (SOP) are physicians… there are clinics where all NP notes must be cosigned by the physician, and they have to run every case by a physician… and others not so.*" NP17-

The illusion of autonomy was informed by experiences with hierarchy and associated negative emotions and dissatisfaction at work:

"*Patients are very perceptive, right? So if the physician doesn't, you know, have confidence in us, it's very easily noticed by the patient… I feel like no matter what I do… the patient will question me… I have been there so long… it can be a struggle.*" NP10-

Several participants reported working at their full SOP but felt they lacked autonomy in practice management and quality improvement.

"*We lost a provider… I am the only one at the site (rural)… there was no availability for future appointments … leadership informed me not to keep a list of people who needed follow up. that there would be consequences if I or my medical assistant kept a list … I had a list of 73 patients at the end of the month… this is not how I want to work.*" NP12-

Four participants, all from different large nonprofit academic institutions, shared that their employers no longer permit NPs to carry independent caseloads. One participant described the change as part of a "*care model transformation effort to manage physician burnout.*" Participants described their responsibilities including physician inbox coverage or "*desktop medicine*" and seeing overflow clinic patients. One participant shared:

"*I think most of us don't really like this desktop work… it would be nice if I had a small panel… to do a little bit more of my own work… every time I go into an exam room, I say, I'm an NP here and I work with Dr. So-and-so … these patients don't even know me… they just know, I can't see my doctor…* "NP10-

All participants described their work environment and the impact of hierarchy on their role and the care they provide. Participants shared their experience of being "*belittled*," "*ignored*," "*pushed aside*," and "*devalued*" by administrators and physicians. These experiences were described in the context of organizational policies perceived as unjust, inequitable, or oppressive. A participant working in an intensive care unit shared:

"*I treat the patient the way I always would, but animosity grows… I feel like I'm constantly fighting to have to get stuff that I need… NPs are salaried not hourly… we all stay late and physicians get paid for overtime… NPs don't.*" NP14-

"*We were supposed to get our quality measure bonuses (like the physicians) but never did… three years with no NPs getting bonuses… they just don't care.*" NP11-

"*We are more stressed… more liable because NPs have more patients than the physicians… they supervise the physician assistants (PA)… the NP may have a panel of 20 and the physician and PA team may have 25 patients…*" NP3-

"*When I was new and training on procedures, we would get bumped for residents and fellows to do their procedures first… They don't care… NPs don't get any time for learning at work… we don't have access to conferences or opportunities to collaborate… or presenting at conferences…*" NP14-

Pay, workload, and access to other work-related resources, such as a dedicated medical assistant or having a scribe, were significant areas of dissatisfaction for participants as they felt marginalized by the system. This was especially true during the pandemic as NPs felt unfairly treated.

"*I was required to still show up every day… I had to walk for 20 minutes past empty parking spaces assigned to people who weren't there… it was demoralizing… They also got bonuses during COVID, financially compensated, and we were not, nor were the nurses that I work with.*" NP7-

Theme 3: No voice. No value

To better understand interpersonal relations at work, behaviors associated with psychological safety were explored. The phrase "psychological safety" was not used during the interview as we did not want to introduce bias or social desirability, given that psychological safety is a less-known concept to some. Instead, speaking-up behaviors associated with risk taking at work were explored. The "No voice. No value." theme describes participants' experiences of speaking up, not feeling heard, and feeling devalued; experiences that led to silence for many. We encountered silence behaviors including *acquiescent silence*, defined as silence behaviors associated with loss of hope for change, and *quiescent silence* defined by the perception of danger or threat to one's safety that results in silence (Knoll et al., 2019). When asked how their voice matters at work, many shared that their voice and opinions were valued by patients, "*I love the teaching I get to do with patients, I think that's where my voice is really heard.*" In contrast, when participants shared stories of speaking up with administrators and physicians they were explicitly ignored and dismissed. This led to *acquiescent* silence.

"*I don't think my voice matters… you will, you know just stop when you don't feel heard.*" NP12-

"*I did try probably the first two years like, 'Hey, we should do this. Hey, we should do that.' It doesn't go anywhere. I just, I gave it up. I don't even try anymore.*" NP11-

"*I don't even think it matters if we speak up… (NPs) we feel like there's no respect… I don't want to say anything…*" NP10-

"*My voice doesn't matter. And I honestly, I think that's burnout. I don't think a whole lot of what we do matters anymore.*" NP15-

Theme 4: Lacking of psychological safety

Psychological safety involves having the perception that one can speak up at work without fear of reprisal. When discussing speaking-up behaviors at work, such as asking for help or raising controversial topics, some NPs reported being unable to speak up and shared experiences of moral injury for not doing so; others shared fear of reprisal should they speak up:

"*The newer people have seen that when you voice your concerns, the judgment happens and you're kind of left out in the cold. So, they won't. NPs are scared of retaliation.*" NP14-

The silence described by NP14 is *quiescent* silence and involves a perception of threat that results in silence (Knoll et al., 2019). Quiescent silence found in the absence of psychological safety is seen in the experiences of NP16 and NP4.

"*I was assisting a cervical fusion… we got in and there was a mass. You could feel the two-centimeter, golf ball size, mass… pre-op said "unremarkable soft tissue exam…" we could not proceed… it wasn't my place to say anything against him…*" NP16-

"*The NP was reckless and dangerous… no real checks and balances. I felt torn, I had some concerns and a lot of these things other people in the provider room were hearing… there were plenty of red flags that they (supervisors) were ignoring… I felt like well, they're ignoring it… what am I going to report… I am the newbie…*" NP4-

Theme 5: Lost vocation

Participant stories and experiences of their work environment were overwhelmingly characterized by emotions of anger, frustration, fear, worry, sadness, and discomfort. The theme "*lost vocation*" describes participants' shared sense of disillusionment with their chosen vocation. A shared feeling of being devalued in a role further captured participants' lived experience with lost vocation, which informed their experience with burnout. One participant shared the experience of their NP team designing a new clinical flow that was then taken and attributed to others, leading to self-doubt:

"*I don't feel appreciated… you are less than… I feel burn out… a sort of hopelessness … the politics and tiptoeing around and having to cover everyone's (physician) work in this sort of, lesser, mid-level kind of capacity… you have to be able to swallow your pride, to be able to do this job…*" NP10-

Devaluation of the NP team's knowledge and capacity:

"*You have the impression you're somewhere you don't belong essentially… the sad part is no one really took what we (NPs) were offering seriously… it*

was difficult to tell, like are we stepping on toes? Can we design a clinical flow? I might not have the MD next to my name, but there is still value being provided." NP6-

"*This is where you come to commit professional suicide… there's no quality improvement projects… no trying to better our organization… I did try… It didn't go anywhere. I just, I gave up. I don't even try anymore.*" NP11-

Despite years of experience, positive patient outcomes, and excellent productivity, being devalued by administrators and physicians was felt by most participants:

"*I don't feel valued. You know, I was told once by my supervisor who I respect, this organization simply utilizes NPs for cheap labor… It was very, very hard to hear that I am a money saver…*" NP12-

A single participant, in solo private practice (as a mental health specialist), shared an experience collaborating with primary care physicians in the community, being yelled at and refused to be spoken to due to being a NP:

"*I've worked in independent practice states… None of this behavior that I'm talking about happened in those states, it has only happened in California. I never had a doctor say, I'm not going to talk to you. I want to talk to your supervisor. I only want to talk to a doctor…*" NP15-

This participant (NP15) later shared that such encounters have led to halting all verbal communication with community physicians. The experience of feeling devalued by the institution was shared by many participants as well:

"*It is an issue of devaluing because when you don't have a seat at the table or when you're not communicated with about key things… there's a sense that you don't need to know, even though you're the person on the ground doing work.*" NP17-

"*I understand they will never see us… certainly our education is different (than physicians). Right? It just feels like it doesn't need to be such a huge gap… We're talking about such a big system… a huge culture.*" NP10-

Theme 6: Finding solution

In our sample of 17 participants, there were five NPs who reported low burnout at the time of the interview. They spoke about their experience of autonomy and agency in the management of their day-to-day clinical practice. Participants described their strategies to minimize or prevent burnout, which centered on setting non-negotiable boundaries at work, protective of wellbeing, and work life balance. These participants also shared confidence in speaking up at work, one participant said: "*I feel comfortable speaking up because… I don't mind leaving the job.*" They also shared confidence in their financial position and ability to find a new job.

"(*Speaking up) Makes me feel liberated because I don't intend to keep his job if it is not safe to my standards. I'm going to advocate for what I really want. And if I don't get it, I'll just go do something else*." NP9-

"*It was stressful (to speak up about refilling supervising physician's patient opiate prescriptions) because I didn't know what would happen once I set my boundaries… I wasn't going to stay at the clinic if they didn't agree*." NP2-

Participants shared ways in which they worked with leadership and advocated for autonomy in their roles, even if this meant narrowing their SOP. Participants shared ways in which they were supported to modify or negotiate for autonomy, including having control of work hours, number of patients seen in a day, and being invited into quality improvement efforts.

"*At the VA NPs became full practice in October 2020… I manage my panels myself… I am their primary care provider… I am independent, and I DO NOT do on-call shifts*!" NP1

"*I am an independent contractor… I like variety… I like to do research and keep myself engaged… I like being in a learning environment. So (in my role) I don't have to answer to anybody. I don't have to justify what I'm doing*." NP16

Supportive leadership was a common factor among those experiencing low burnout, as their leaders respected and supported boundary-setting, enhancing their sense of value at work. Conversely, the twelve participants experiencing burnout highlighted significant challenges related to a lack of autonomy and inadequate support, which they felt contributed to their burnout. These NPs expressed frustration over restrictive work environments and the inability to fully utilize their skills and training. One participant shared, "Like I want to be an NP! That's what I went to school for. Please let me do more than what I'm what I'm doing now." Another shared the need for adequate practice support, "I had asked and asked please can someone give me some back? (medical assistant support) I burned out because I wasn't getting the support. We need more support!" By including the perspectives of those experiencing burnout, it became clear that enhancing NP autonomy and providing adequate support are crucial for mitigating burnout and improving job satisfaction. This comprehensive view supports the development of targeted solutions that address both the needs of those thriving and those struggling within their roles.

Discussion

This study is the first to delve into NP experiences with burnout and psychological safety using a comprehensive social-ecological approach, examining both the complex structural and relational elements of the work environment. Unlike previous studies that may have isolated these factors,

our application of the Social Ecology of Burnout (SEB) framework allows for a nuanced exploration of the interconnected and transactional relationships that influence these experiences within healthcare settings.

A culture of burnout

Our findings introduce the concept of a "culture of burnout," where NPs describe their work environment in terms of dread and apprehension, a sentiment echoed in similar studies, such as the ethnography by Muir et al. (2022). This study extends the definition of burnout beyond feelings of incompetence and inefficacy as suggested by Maslach and Leiter (2017), to include feelings of inferiority and devaluation due to hierarchical structures within healthcare organizations. This insight is critical as it highlights how institutional hierarchies contribute uniquely to burnout among NPs, suggesting that interventions need to address these structural elements. Participants' feelings of inferiority and devaluation were often in conflict with their commitment to patient care, highlighting a deep-seated internal conflict between the work environment and their duty to care for patients. Confirming findings from a qualitative study of 26 primary care providers (Agarwal et al., 2020), our participants also reported heavy workloads and burnout with associated feelings of demoralization and devaluation. Agarwal et al. (2020) identified a lack of control over external factors, such as workload and insufficient health-system support as primary drivers of burnout. Similarly, our study finds that NPs experience a lack of agency over external work factors, however with the added experience of subjugation as autonomy was narrowed or removed by their institution or supervisor. This aligns with Kanter's theory, which posits that one's perception of power and control within the workplace is a critical determinant of occupational stress and burnout (Kanter, 1993). These insights suggest that addressing hierarchical power dynamics and enhancing individual perceptions of control and autonomy are essential strategies to mitigate burnout. Our study extends the discussion beyond traditional factors like workload and emotional stress to include the structural and relational dynamics that uniquely affect NPs, urging a reevaluation of organizational policies and practices that contribute to a pervasive culture of burnout.

Psychological safety and silence behaviors

Our study further distinguishes itself by exploring the implications of silence behaviors—both quiescent and acquiescent—in NPs. Rather than mere symptoms of a flawed system, our findings suggest that these behaviors are significant predictors of both a lack of psychological safety and

potential burnout. Notably, our participants did not directly associate these silence behaviors with burnout; instead, they linked them to feelings of concern for patient safety, self-doubt, and devaluation. These are classic indicators of fear arousal, which significantly contribute to a lack of psychological safety in the workplace (Knoll et al., 2019).

Silence behaviors were most present in described interactions with physicians and administrators, highlighting the impact of hierarchical structures on communication dynamics. This finding aligns with recent research that identifies hierarchy and authoritarian leadership as barriers to psychological safety and open communication within healthcare teams (O'Donovan et al., 2021; Remtulla et al., 2021).

Creating a culture of psychological safety

Establishing a culture of psychological safety is not automatic but requires deliberate and sustained effort. Effective leadership plays a crucial role in this process. Our findings in those who found solution align with a study by Ma et al. (2021), that found environments where leaders promote inclusivity, an open culture, and encourage speaking up are associated with enhanced psychological safety and reduced burnout. Our findings underscore the importance of leader behaviors that support open dialogue and validate the contributions of all team members, particularly those who might feel marginalized within the existing power hierarchy. This involves not just policy changes but also a shift in the organizational culture to value and act upon the input from all staff members, thereby mitigating the risks associated with silence behaviors and enhancing well-being for all.

The NP work environment

The work environment was described as an illusion of autonomy where hierarchy, inequity, and marginalization are experienced. Illusion of autonomy is an institutional factor in SEB as it is driven by workplace policies experienced by the individual. The theme, "No voice. No value." captures participants' feelings and perceptions of how their voice matters at work. When speaking up with administrators and physicians, participants shared that their voice did not matter, and led to acquiescent silence in many scenarios. Acquiescent silence or loss of hope that one's voice will be heard is "inhibition-oriented with the goal of avoiding harm, such as social rejection" (Sherf et al., 2021, p. 117). In a recent longitudinal study of employed adults, prior acquiescent and quiescent silence predicted burnout, with quiescent silence having a significant positive effect on burnout (Knoll et al., 2019). While our participants did not connect their experience of

acquiescent silence with burnout, they did connect it to being devalued and being seen as less than their physician colleagues.

Participants' interpersonal experience with acquiescent silence and the resulting emotional experience of being devalued was further confirmed by inequitable institutional policies. Policies experienced as marginalizing to NPs were specific to issues of pay, work resources, and continuing education. Examples of marginalization include unequal pay structures, lack of resources to get the job done, and no time for education or quality improvement. The most poignant experiences with marginalization were from our participants who described having their patient panels removed or greatly reduced to cover physician in-boxes and overflow. The examination of organizational policies and practices that remove patient panels from NPs is beyond the scope of our study. However, it raises concern for the impact on access and cost of care as well as the impact on physicians. These institutional policies have created work environments defined by inequity and marginalization, a finding in stark contrast with the value placed on "health equity" commonly appearing in hospital mission statements. Strategies to improve the working environment for NPs could include examining and addressing structural hierarchies and policies present in institutions that marginalize NPs. A recent consensus statement by the American Academy of Nursing (Naegle et al., 2023) calls for workplace policy to support inclusivity, freedom from discrimination, and equal opportunity for career advancement, with a specific focus on implementation of due process for laws that restrict NP SOP.

These findings underscore the need for a critical examination of organizational policies and practices that perpetuate these inequities. Strategies to improve the working environment for NPs could include examining and addressing structural hierarchies and policies present in institutions that marginalize NPs.

Oppressive policies and lost vocation

The theme of "Lost vocation" emerged from our study, capturing the burnout experienced by NPs and characterized by a perception of the devaluation of their professional roles. This perception was not isolated to an individual but shared by many across multiple organizations. Workplace culture as defined by Braithwaite et al. (2017), consists of "member's shared beliefs, assumptions, attitudes, and behaviors" which inform interactions at work, are often automatic, and seen as "just the way things are."

From a social-ecological perspective, the struggle with "Lost Vocation" is rooted in oppressive workplace cultures where power and autonomy are restricted for NPs (de Lisser, Dietrich, et al., 2024). The accessibility to

autonomy and professional respect begins with public policy that promotes national expansion of SOP for NPs, and robust institutional support their practice roles. This perspective is supported by a recent study by Poghosyan et al. (2021), which documented improvements in NPs' work environments and their relationships with physicians following state law expanding NP SOP in New York. These findings underscore the critical impact of public policy and institutional practices on the professional lives of NPs and highlight the urgent need for systemic changes to restore and respect the vocational identity of NPs within the healthcare system.

Burnout solutions promote autonomy and agency

Participants who did not experience burnout shared crucial strategies that helped maintain their autonomy and agency in their work lives, underscoring a proactive approach to their professional environments. A common theme among these five participants was their confidence in their ability to leave the job if demands for autonomy and control were not met. This assertiveness was independent of their experiences with psychological safety. Our findings support Sherf et al. (2019, p. 448), who suggested that "self-initiated, future-focused, and change-oriented," voice behaviors are protective against burnout. Additionally, participants not experiencing burnout were about 10 years older than NPs who were experiencing burnout and had more years of experience, findings consistent with prior NP studies, where age and years of experience were associated with job engagement, decreased burnout (Klein et al., 2020), and increased job satisfaction (Spetz et al., 2018).

The burnout solutions identified through this study are innovative and pave the way for an ecological approach to future education, practice, and policy aimed at reducing NP burnout (Habeger et al., 2022). Key solutions include ensuring independence in scope of practice, autonomy in practice management, and the promotion and valuation of NP roles. Furthermore, enhancing professional competencies, such as communication and negotiation skills are vital. These strategies not only foster professional confidence but also support NPs in navigating and influencing their work environments effectively. As social ecologies and the individuals within them continue to evolve, our findings highlight opportunities to support changes at all levels, advocating for a more empowered and sustainable professional practice for NPs. This approach not only addresses individual needs but also contributes to broader systemic improvements conducive to reducing burnout and enhancing job satisfaction among nurse practitioners.

Limitations

Our study presents the stories of NP experiences with burnout, but it is important to acknowledge several limitations. First, participants were recruited from a sample of NPs who completed an online survey and self-selected to be interviewed. We did not recruit from NPs who completed the paper-based survey, which might introduce generational bias toward those more comfortable with technology, despite efforts to recruit a diverse age range. Another study limitation is selection bias. Our aim was to explore burnout in NPs, which may have influenced those who chose to participate; as they might have been more inclined to discuss burnout. Conversely, NPs who were too affected by burnout might have been inadvertently excluded from our study, representing a possibly critical subset of the population. To address social desirability bias in responses, we conducted pilot testing of our interview questions to ensure questions were appropriately clear and unbiased, allowing participants to respond freely. Furthermore, the transferability of our findings could be limited by geographical and regulatory differences. California is a restricted SOP practice state, this context may influence themes of autonomy and lost vocation in other states, such as Oregon, where independent practice was granted 30 years ago. Lastly, our data were collected as the COVID-19 pandemic was winding down and this historical event may have heavily influenced burnout and work experiences. Future research should aim to include a broader and more varied NP population and consider the evolving circumstances affecting healthcare environments to enhance the understanding and applicability of our findings. This exploration should particularly strive to reach those who are most vulnerable and possibly silent due to severe burnout, to truly understand and address the full spectrum of experiences within the NP community.

Conclusion

This study examines structural and relational factors within workplace environments that contribute to burnout, particularly highlighting the lack of psychological safety experienced by many nurse practitioners (NP). Based on insights gathered from interviews with five NPs, key solutions have been identified. These solutions emphasize strategies that foster autonomy, agency, and a culture where all voices are valued.

Adopting a social ecological perspective on burnout, our findings underscore the need for a transformative shift in the culture of healthcare organizations. Such a shift should aim to cultivate an institutional environment that promotes psychological safety for all. Recognizing the magnitude of such a shift, we call on policymakers to consider the designating burnout

as a quality indicator for all healthcare organizations. This designation could serve as a critical lever for enacting large-scale change, ensuring that the well-being of healthcare workers is prioritized, which in turn enhances the overall quality of patient care.

Disclosure statement

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