

“I Like the Feeling of Connecting With People”: A Mixed-Methods Study of Nursing Assistants Experiences Across the Care Continuum

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Abstract

Nursing assistants (NAs) are critical professionals across the long-term care continuum. Despite the demands of NAs, these frontline personnel experience workplace challenges and turnover at a disproportionate rate compared to other professionals. Much research has explored the experiences of nursing assistants using federal survey data and national datasets. Guided by a socio-ecological model and the job-demands resource model, this study utilized a sequential mixed-methods approach to uncover a more nuanced understanding of NA workplace experience. Results from this combined qualitative ($N=17$) and quantitative ($N=354$) study found that there are several workplace aspects, such as organizational culture and supervisor relationships, that contribute to NA experiences across system levels. Further exploration of direct care tasks directly from nursing assistants is necessary to understand full intentions.

Keywords

nursing assistants, nursing homes, long term care, care continuum, workforce issues

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What This Paper Adds

- This paper explores the factors that contribute to high turnover rates from the direct care workforce of nursing assistants (NAs) in the field of long-term care guided by a socio-ecological framework and the job-demands resource model.
- The current literature suggests that the main reasons NA's leave their employment is due to salary, staffing, and lack of resources (i.e., personal protective equipment (PPE), incontinence products, equipment). However, this study demonstrates that there are deeper issues and identifies additional challenges such as physically demanding work, work related injuries, and fear that varies depending on the work environment (i.e., home care versus facility-based care).
- This study uncovers elements of the workplace that contribute to NA turnover and burnout, including interpersonal factors, institutional

factors, community factors, and job demands. These findings may allow for better understanding of needed organizational change.

Applications of Study Findings

- Researchers may consider collecting data directly from nursing assistant, rather than national datasets or survey datasets to better understand workplace experiences.
- Incorporating these findings with other work suggests that there is a disconnect in workplace cohesion between nursing home administrators

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and nursing assistants. Nursing home administrators consider wages and salary to be impetus for turnover, however nursing assistants more frequently report organizational culture and supervisor relationships as reasons for turnover.

- Future research must consider updated Centers for Medicare and Medicaid Services (CMS) provisions and its impact on nursing facility staff hours requirements, such as the increased nursing assistant to resident staffing ratio.

Nursing assistants (NAs) are vital professionals across the long-term care continuum—nursing homes, assisted living facilities, and acute/behavioral health care. Defined by the U.S. Bureau of Labor Statistics (2022a), NAs “provide basic care and help patients with activities of daily living” (para. 1). More specifically, NAs may help residents and patients use the toilet, help with bathing, and measure vital signs (e.g., blood pressure (BP) and temperature), and assist with dressing (CMS.gov, n.d.). Presently, there are over 1.3 million NAs that provide care to adults in need. Specifically, 448,000 NAs provide care to older adults in nursing homes, while 396,060 NAs deliver care to individuals across medical and surgical care hospitals (U.S. Bureau of Labor Statistics, 2022b). Approximately 140,910 nursing assistants work across Assisted Living and Retirement Communities (U.S. Bureau of Labor Statistics, 2022b), and home health care services are reported to employ the fewest NAs in the healthcare field (81,640) compared to other organizations across the care continuum (U.S. Bureau of Labor Statistics, 2022b).

Projections of the employment need for NAs across settings show a 4% growth between 2022 and 2023, with over 200,000 available positions for NAs each year across the next ten years (U.S. Bureau of Labor Statistics, 2022a). Often referred to as the direct care workforce, NAs “represent the largest group of workers in the long-term care workforce” (HRSA Health Workforce, n.d., para. 4). Despite the critical importance of NAs within health care and the growth of this workforce, there has been a long-associated history of turnover. In a national assessment of turnover among NAs, Gandhi et al. (2021) found that the mean annual turnover among NAs in nursing homes was 129%. For NAs working in home health, the annual average separation rate for nurses working with a prominent home health organization was over 30% (Bergman et al., 2022, in Candon et al., 2023).

While there is much research on the role of NAs across the care continuum, most studies that examine NA turnover utilize national datasets, such as the Centers for Medicare and Medicaid, current Certification and Survey Provider Enhanced Reports (CASPER) data, formerly referred to as the Online Survey Certification and Reporting (OSCAR) system. Additional sources include the National Nursing Assistant Survey (NNAS) and the Medicare and Medicaid Cost Reports (e.g., Banaszak-Holl et al., 2015; Castle, 2005, 2008; Castle &

Anderson, 2011; Castle et al., 2020). These studies do not incorporate data directly from NAs, rather from required federal surveys. As such, our study sought to explore the factors that contribute to high turnover rates from the direct care workforce of NAs in the field. Guided by a socio-ecological model (Bronfenbrenner, 1979; McLeroy et al., 1988) and job-demands resource model (Demerouti et al., 2001), this research focused on factors associated with NA turnover that are perceived as enjoyable and least enjoyable, including activities and workplace relationships.

Theoretical Frameworks

Two theoretical frameworks guided this research study. First, the research was informed by a socio-ecological framework (Bronfenbrenner, 1977; McLeroy et al., 1988). Used frequently in earlier research, such as burn-out among frontline public health employees (Habeger et al., 2022) and disparities in workplace exposures and the impact on health consequences (Ingram et al., 2021), the socio-ecological framework was used here to explore the various levels of influence that affect a nursing assistant (NA) in their role. The socio-ecological theory explains that there is an interactive relationship between an individual and their larger environment. More specifically, there are elements or levels of influence that impact an individual in their specific context (Özdoğan, 2011). These levels of influence include intrapersonal factors (e.g., attitudes, beliefs, personality), interpersonal factors (e.g., relationships with others), institutional level factors (e.g., organizational rules and policies), community factors (e.g., local unemployment rates, transportation access), and policy factors (e.g., policies and laws that impact an organization). Each of these factors overlaps and interplays between and across individuals within their personal relationships, community, and society at large (Centers for Disease Control and Prevention (CDC), 2022). Within the context of working across the care continuum, NAs may be influenced by some or all system levels within the socio-ecological model.

The second theoretical framework used in this study was the Job Demands-Resource model (JD-R) (Demerouti et al., 2001). Initially developed by Demerouti et al. (2001) to examine employees within the fields of human services, transportation, and industry, the JD-R model has become increasingly popular to explore workplace experiences across professions. Recently, research by Thapa et al. (2022) revealed that nursing professionals lack job resources (e.g., social support and rewards) and have an increase in job demands (e.g., psychological demands and job efforts). The lack of resources and heightened demands may ultimately lead to negative health outcomes (Thapa et al., 2022). In a similar study, Britt et al. (2021) examined job demands and resources among health-care professionals during COVID-19, which reveal

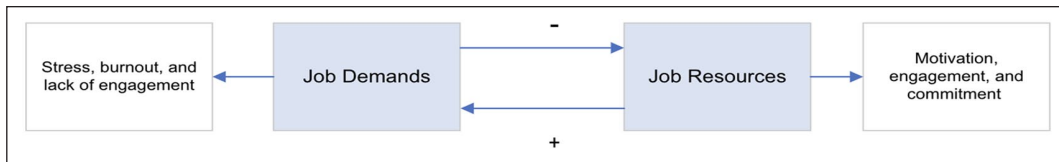


Figure 1. Job-demands resource model (Demerouti et al., 2001).

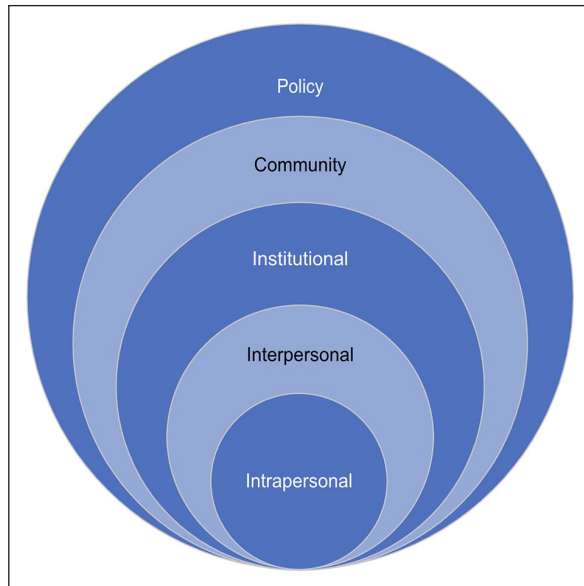


Figure 2. Socio-ecological framework (Bronfenbrenner, 1977; McLeroy et al., 1988).

that job demands (e.g., shortage of PPE) and hours worked “were each related to higher mental health strain” (p. 121). Overall, the JD-R model suggests that every job includes demands that require “sustained physical or mental effort” (Demerouti et al., 2001, p. 501). Job demands can be the challenging or “bad things at work” (Schaufeli, 2017, p. 121). In the context of nursing assistant workplace experiences, job demands may lead to burnout and turnover. In contrast to demands, job resources are aspects of day-to-day work that NAs may enjoy, provide growth, or consider “good things” (Schaufeli, 2017, p. 121). For these professionals, job resources may be workplace autonomy or positive performance feedback. The interaction and incorporation of these two theoretical frameworks can be found in Figures 1 and 2.

Methods

Guided by the socio-ecological model (Bronfenbrenner, 1977; McLeroy et al., 1988) and the Job Demands-Resource model (Demerouti et al., 2001), this research used an exploratory sequential mixed methods approach to uncover job experience and turnover among NAs. An online qualitative survey was followed by quantitative survey and respective analysis. Taken together, this

research uncovers socio-ecological factors, job demands, and job resources that NAs experience on the job across the care continuum.

Qualitative Data Collection

Initially approved by a university’s Institutional Review Board (IRBNet #: 1880143) prior to data collection, the first phase of this study began with posting a project flyer to a variety of social media sites (e.g., Facebook, LinkedIn). Eligible individuals interested in the study were invited to click an interview link. Inclusion criteria for this study were individuals who identified as nursing assistants, nurse aides, State Tested Nursing Assistants (STNAs), Certified Nursing Assistants (CNAs), and/or Home Health Aides (HHA). Additionally, individuals had to understand English and be able to engage in the survey electronically. Once clicking the link, individuals were taken to the study’s informed consent page, which outlined the voluntary nature of the study and the study purpose, procedures, benefits, and risks. Prospective participants indicated their decision by proceeding with the interview link. The qualitative portion of this study was brief, first asking participants a series of open-ended questions followed by demographic questions. Open-ended questions covered topics related to place of employment, employer relationships, activities on the job, barriers, and benefits to care for patients, and career goals. Demographic questions in this study included gender, age, race/ethnicity, employment status, professional certifications/licensures, type of facility or home health agency, and profit status of their facility/agency. All participants who engaged in the qualitative portion of this study had an opportunity to be entered into a raffle to win 1 of 20 Amazon gift cards valued at \$100 each.

Quantitative Data Collection

After the qualitative survey closed, a separate online survey was distributed in partnership with a national nursing assistant membership organization, the National Association of Health Care Assistants (NAHCA). NAHCA is a professional organization that represents certified nursing assistants that work across the care continuum including nursing homes, assisted living, home care, and acute care. This organization distributed the survey to their membership base via email and through Facebook ads. Like the qualitative portion of

this study, inclusion criteria were individuals who identified as nursing assistants (e.g., nursing assistants, nurse aides, State Tested Nursing Assistants [STNAs], Certified Nursing Assistants [CNAs], and/or Home Health Aides [HHA]). Individuals had to understand English and be able to engage in the survey electronically. Prospective nursing assistants interested in this study were invited to click a link to read more about the study purpose and complete the informed consent document. The survey included questions related to workplace satisfaction, intent to leave their position, motivations to working as a NA, and experiences on the job when working with patients/residents. Additionally, demographic questions were included in this survey including place of employment (state), gender, age, professional certifications/licensure, and years working as a NA. Separate from the qualitative phase of this study, all participants who engaged in the quantitative survey had an opportunity to be entered into a raffle to win one of 20 Amazon gift cards valued at \$100 each.

Data Analysis

Qualitative Data Analysis

Guided by the overarching purpose of the study, the research team utilized the RADaR (rigorous and accelerated data reduction) (Watkins, 2017) technique to analyze the qualitative results. RADaR (Watkins, 2017) is comprised of five steps to ultimately reduce the data down to content only beneficial for the study results. In step one, data were organized into what Polenick et al. (2020) describe as an “all-inclusive data table” (p. 593). Next, each column within the all-inclusive data table was moved through to ensure that text—participant responses—specifically answered the research question(s). In the third step, open codes were developed based on participant responses. Fourth, open codes were narrowed down to “focused codes” (Grinnell & Unrau, 2011; Watkins, 2012, as cited in Watkins, 2017, p. 3). In the final step, by way of this multi-phasic, iterative process, data were reduced to the final themes presented below; the results that follow emerged from the data. Demographic data from the qualitative portion of the study were analyzed using SPSS 28.0 (IBM Corp., 2021).

Quantitative Data Analysis

Quantitative survey data were also analyzed using SPSS 28.0 (IBM Corp., 2021). Respondents were stratified into three categories based on their reported workplace setting hence, nursing assistants (NAs) were categorized into those who reported working in a Nursing Home or Assisted Living Facility (NHALF), Acute Care Setting (ACS), or a Home Health or In-Home Care (HHHC) setting. The survey inquired into NAs’ experiences in their job and explored aspects of what they “liked most

Table 1. Demographic Characteristics of Nursing Assistant Participants From the Qualitative Study ($N=17$).

Item	n (%)
Gender	
Female	13 (76.5)
Male	3 (17.6)
Other (non-binary)	1 (5.9)
Age	
20–24	4 (23.6)
25–30	10 (58.8)
30+	3 (17.6)
Race/Ethnicity	
White	13 (76.5)
African American	1 (5.9)
Non-Hispanic White	2 (11.8)
Latinx/Hispanic	1 (5.9)
Highest level of education	
4-year degree (BA/Bs)	5 (29.4)
Associates degree	3 (17.6)
LPN certification	2 (11.8)
STNA/CNA certification	5 (29.4)
Other (working on RN degree)	1 (5.9)
Additional professional licensures/Certifications	
Restorative nursing assistant	5 (29.4)
Certified medical assistant	4 (23.5)
Certified medication aide	3 (17.6)
NHA	1 (5.9)
No additional licensure/certifications	5 (29.4)
Length of time employed as nurse aide	
Less than one year	2 (11.8)
1–3 years	6 (35.3)
4–6 years	6 (35.3)
More than 6 years	3 (17.6)
Current employment status	
Full-time	11 (64.7)
Part-time	2 (11.8)
Per-diem	3 (23.5)

Note. Percentages may not equal 100% due to rounding and/or non-reported answers.

about the job,” the “best things about the job,” and the most “challenging aspects of direct care tasks, relationships, and the workplace environment,” respectively. Analyses were descriptive in nature and aimed at examining patterns in responses across employment settings thus providing an exploratory understanding of NAs’ experiences within a diverse care continuum.

Results

Qualitative Results

Demographic Information of Qualitative Study Participants. Valid responses were collected from 17 nursing assistants ($N=17$) (see Table 1). Most participants identified as White ($n=13$, 76.5%), female ($n=13$, 76.5%), and between the ages of 25 to 30 ($n=10$, 58.8%). Eleven ($n=11$, 64.7%) NAs reported having less than a 4-year

education and noted their state-testing credentials or certificates whereby 29.4% had a State Tested Nurse Aide (STNA) certification or Certified Nursing Assistant (CNA) certificate, an associate degree (17.6%), or Licensed Practical Nurse (LPN) certification (11.8%). When asked about their nursing assistant certification, the majority stated they had been certified between 2016 and 2022 (64.7%), have been a NA between 1 to 6 years (70.6%), and have at least one other professional certification such as Restorative Nursing Assistant (29.4%), Certified Medical Assistant (23.5%), Certified Medication Aide (17.6%), and/or Nursing Home Administrator (NHA) (5.9%). When asked about their current work status, 11 NAs stated they worked full time (64.7%). Additionally, NAs that engaged in the qualitative portion of this study reported working either 12-hour (29.4%) or 8-hour shifts (29.4%). When asked about the agency they worked for, respondents reported working at a Nursing Home (35.3%), Home Health agency (11.8%), Assisted Living Facility (11.8%), or a combination of these (41.3%). The type of services offered also varied among participants, but most stated their facility offered skilled nursing in addition to long-term care, assisted living, and/or independent living (58.8%).

Results From Qualitative Study Participants. Qualitative study participants shared a variety of their workplace experiences, which are organized by socio-ecological factors of influence (Bronfenbrenner, 1979; McLeroy et al., 1988). These findings, which include non-verbatim participant responses, are organized by interpersonal factor levels, institutional factor levels, and community factors. See Table 2 for direct participant responses organized by levels of influence.

Interpersonal

Relationships Between Others in the Workplace. Nursing assistants (NAs) in this study overwhelmingly described *relationships between others in the workplace* as a contributing factor to intentions to stay or leave. NAs explained that relationships with co-workers and colleagues impacted their overall workplace environment (Participant # 1, Participant # 17). For example, one participant described that the environment of their colleagues, co-workers, and managers were important in their maintaining their position as an NA (Participant # 1). Similarly, another nursing assistant explained that treatment from colleagues was important to them (Participant # 17).

In addition to peer-colleagues within their respective facilities, four NAs expressed that relationships with supervisors/managers had the power to influence their position negatively and positively. Several participants expressed negative sentiments with regards to their supervisors, such as “being underestimated” (Participant # 10) and their attitude towards them as a

nursing assistant (Participant # 4). Additionally, NAs hoped that management would take interest in providing more support as a team leader (Participant # 6) and engaging in encouraging, positive non-verbal and verbal communication, such as words of encouragement, helping when needed, and providing workplace incentives (Participant # 1).

Relationships With Residents. Another important aspect of NA experiences with their workplace were *relationships with residents/patients*. Almost all NAs unanimously agreed that their *relationships with residents* were powerful, positive, and beneficial. For six participants, it was the power of connecting with residents through communication, storytelling, active listening, and building bonds (Participant #s 1, 7, 16) that outweighed challenges that came with the work, such as completing work that is expected for five NAs. Additional attributes that were overwhelmingly positive for NAs were making a difference in the lives of particularly vulnerable residents/patients (Participant # 6) and witnessing patients recover (Participant # 17) from health challenges. Working to make an impactful difference was “so rewarding” (Participant # 1) despite all the workplace difficulties and challenges.

Institutional Factors

Staffing. Participants in this study explained that *staffing* affected their workplace environment and job satisfaction. Four participants shared that understaffing made it difficult to provide quality resident/patient care (Participant #s 2, 14). More specifically, NAs described that a lack of adequate staffing “increased work demand,” making it challenging to effectively complete required tasks and provide quality care (Participant #s 15, 16). Respondents reported that staffing concerns made it difficult to spend quality time with and attend to the high needs of each resident (Participant # 14), and that tasks were often completed in a “rush” resulting in increased mistakes (Participant # 16). One participant shared that they are often “the only one on a floor,” which contributed to how difficult they found their job to be (Participant # 14), this increasing the likelihood they would leave their position as a NA. Overall, participants highlighted the need for adequate staffing to effectively provide quality care, complete tasks properly, and increase satisfaction and willingness to stay at their job.

Hands-On Care. Another institutional level factor noted by NAs was providing *hands-on care*. Providing this level of care was identified as a challenging aspect of the profession that may influence one’s decision to stay or leave their place of employment. Based on NA responses, successful completion of physically demanding hands-on tasks was often dependent on adequate facility staffing. For example, one NA mentioned that

Table 2. Nursing Assistant Participant Responses.

Level of influence	Example quote(s)
Interpersonal factors	
Relationships between others in the Workplace	<p>“The environment from the employees/management . . . Words of encouragement, incentives, and helping out when needed” (P1)</p> <p>“My employer’s attitude towards me” (P4)</p> <p>“Support from management” (P6)</p> <p>“The support of the leaders” (P7)</p> <p>“Being underestimated by your leader” (P10)</p> <p>“I believe that nurses aides are looked down upon at nursing homes. Really they are the closest with the residents and are helping them the most. Because of this, my goals are to one day become an administrator” (P14)</p> <p>“The condition of working, and treatment from my colleges (<i>sic</i>) and other people” (P17)</p>
Relationships with residents	<p>“Building bonds . . . It is so rewarding but the hardest work I’ve ever done. With staffing shortages you are expected to do the work of 5 people in just yourself. However I love taking care of the same residents and hearing there personal stories while taking care of them in there (<i>sic</i>) most vulnerable stage” (P1)</p> <p>“Chatting with patients . . . Connect with patient” (P5)</p> <p>“Making a difference” (P6)</p> <p>“I like the feeling of connecting with people” (P7)</p> <p>“Listening to stories . . . Talking with them . . . Forming connections” (P16)</p> <p>“Seeing patients recover quickly” (P17)</p>
Institutional factors	
Staffing	<p>“Short staff makes it hard to give quality (<i>sic</i>) care” (P2)</p> <p>“Time for each resident . . . Often at the nursing home I work at, I am the only one on a (<i>sic</i>) entire floor which can become super hard. I believe that if it was required for there to be a certain ratio (or a lower one if there already is one) then I would be more likely to stay an STNA in a nursing home for longer.” (P14)</p> <p>“Staffing issues” (P15)</p> <p>“The increased work demand with not enough staff . . . increase staffing to effectively complete my required tasks” (P16)</p>
Hands-on care	<p>“The hardest procedure for me is to have to insert a catheter into an obese woman. Sometimes it takes two to hold up her tummy and the other to pull the private parts open . . .” (P5)</p> <p>“Caring for residents that are larger alone in a home without bed rails/when they cannot roll is hard” (P14)</p> <p>“I find it difficult to find someone to use a lift with me so I don’t have to do it myself” (P16)</p>
Resources	<p>“Supply shortage” (P1)</p> <p>“Equipment” (P2)</p> <p>“Lack of resources to support residents care (access to disposable underwear, issues with hyper lifts, etc.)” (P6)</p>
Community factors	
Travel time	<p>“Because my home is close to my work place (<i>sic</i>), I will continue to work as a nurse assistant” (P3)</p> <p>“Distance problem, far from home and back is not convenient” (P12)</p> <p>“The distance” (P13)</p>
Education	<p>“Nurse aide training is a joke with most facilities only orientating new aides for 5 days” (P6)</p> <p>“Being trained for situations /in more realistic (<i>sic</i>) ways while kn (<i>sic</i>) the classes (I have found the classes vs real life are very different . . . I believe that state trining (<i>sic</i>) to become a nurses aide needs to be updated and for more clinical time for students” (P14)</p>
Compensation	<p>“Under payed (<i>sic</i>)” (P2)</p> <p>“My employer will raise my salary according to my working years, so I am very willing to continue to work as a nursing assistant” (P3)</p> <p>“Financial strain” (P4)</p> <p>“More promotion opportunities and more compensation” (P5)</p> <p>“Money-facilities do not pay sides (<i>sic</i>) enough” (P6)</p> <p>“Raise my salary a little” (P7)</p>

Note. Direct quotations may contain grammar and/or spelling error. These errors are noted as “*sic*”. Participant ID # abbreviated using “P”

it was difficult to identify an available staff member within their facility to use a lift (Participant # 16), while another mentioned the difficulty of providing care for larger residents without another staff member, especially when there are no bed rails or when the patient has limited mobility (Participant # 14).

Another NA explained in detail the difficulties of providing incontinence care, which is a hands-on care task needed among nearly 50% of residents in long-term care (AAPACN.org, 2021). This respondent indicated that providing adequate incontinence care is especially difficult with obese patients, and that providing this service sometimes requires more than one staff member (Participant # 5).

Resources. NAs conveyed that insufficient resources within their facility such as supply shortages, access to resources, and deficient equipment, hindered their ability to work efficiently and created obstacles in delivering care. Respondents mentioned a lack of needed supplies and equipment required to provide direct care to residents and patients (Participant # 1). More specifically, respondents highlighted a lack of proper dressing and toileting supplies, such as disposable underwear and equipment to transfer to and from patient beds (Participant # 6). NAs went on to further explain that available equipment provided by their agency/facility is often lacking (Participant # 2), such as issues with hyper lifts, which ultimately prohibits staff from providing the best care possible.

Community Factors

Travel Time. For at least three NAs, *travel time* to and from their place of employment—either a nursing home or patient’s home for home health services—was identified as a challenging *community factor* that shaped one’s intention to stay or leave. For one participant, living close to their place of employment greatly increased their likelihood of continuing to work as a nurse assistant (Participant # 3). For others, an increase in travel time was a deterrent, conveying that longer travel times to and from work “is not convenient” (Participant # 12, Participant # 13).

Education. NA participants shared the importance of increased NA education. Despite each NA being required to take 12 continuing credit hours per year to maintain their licensure status, many respondents expressed their dissatisfaction with the lack of adequate training they had received. NAs reported the need for additional training with one stating that “most facilities only orientating new aides for 5 days” (Participant # 6). One respondent reported their concern about training being unrealistic of real-life situations and outdated (Participant # 14). NAs further highlighted the importance of continued and updated training, including increased clinical time for students (Participant # 14).

Compensation. A final component of care delivery that impacted NAs at the *community level* was *compensation* for employment (i.e., the wage or salary provided by the facility). Respondents reported that they felt underpaid, needed a raise or increase in their salary, should be provided adequate benefits, and/or experienced financial strain because of their compensation (Participant #s 2, 4, 6, 7, 9, 13). Further, NAs discussed the relationship between compensation and willingness to stay. For example, one respondent specified that their employer allocated raises based on the number of years the employee had been working at the facility. As a result, this NA was more willing to continue to work at their facility in hopes of receiving supplemental raises (Participant # 3). On the contrary, one respondent mentioned that if there were more promotional opportunities and compensatory benefits available, their willingness to stay would increase (Participant # 5). Based on several NA responses it is evident that adequate pay and benefits, and promotional opportunities influences one’s willingness to continue to work in the profession.

Quantitative Results

Demographic Information of Quantitative Survey Participants. A total of 354 NAs participated in the quantitative survey (Table 3). The majority of NAs reported working in an NHALF ($n=194$) followed by ACS ($n=113$) and HHIHC ($n=47$) settings. Most participants were non-Hispanic white ($n=187$; 52.8%), female ($n=283$; 80.2%), completed some college ($n=128$; 36.2%), and reported their length of employment as six or more years ($n=205$; 57.9%).

Results From the Quantitative Survey. Consistent with the qualitative findings, survey participants responses were organized by socio-ecological factors (Bronfenbrenner, 1979; McLeroy et al., 1988), including interpersonal factors, institutional factors, community factors, and job demands (Demerouti et al., 2001). Results for NHALF, ACS, and HHIHC nurse aides are shown in Tables 4 to 6, respectively.

Interpersonal Factors

Relationships Between Others in the Workplace. Among NHALF’s, 20 (11.9%) of NAs reported that co-worker relationships were what they liked most about the job. Similar patterns were observed among ACS NAs, where 20 (20.2%) of NAs valued co-worker relationships. Getting to know co-workers was reported as the best thing about the job among 83 (42.8%) of NHALF NAs compared to 48 (42.5%) of ACS nursing assistants. Relationships with supervisors was important as 21 (13.3%) of NHALF’s, 12 (13.8%) of ACS’s, and 11 (26.8%) of HHIHC’s citing their perceptions of management care as what they like most about the job. Challenges were also reported, as 115 (59.3%) of NHALF’s and 47 (41.6%) of

Table 3. Demographic Characteristics of Nurse Aide Participants From the Quantitative Study..

Demographic characteristics	Full sample (N=354)	NHALF (n=194)	ACS (n=113)	HHIHC (n=47)
Item	n (%)	n (%)	n (%)	n (%)
Gender				
Female	283 (80.2)	170 (88.1)	76 (67.3)	37 (78.7)
Male	57 (16.1)	20 (10.4)	30 (26.5)	7 (14.9)
Other (non-binary/transgender)	13 (3.6)	3 (1.5)	7 (6.2)	3 (6.4)
Race/Ethnicity				
White, non-Hispanic	187 (52.8)	112 (57.7)	50 (44.2)	25 (53.2)
Black	116 (32.8)	57 (57.7)	39 (34.8)	20 (42.6)
Latinx/Hispanic	17 (4.8)	8 (4.1)	9 (8.0)	—
Other	33 (9.3)	17 (8.8)	14 (12.5)	1 (2.1)
Highest level of education				
Some high school	11 (3.1)	10 (5.2)	—	1 (2.1)
High school diploma or equivalent	82 (23.2)	48 (24.7)	20 (17.7)	14 (29.8)
Some college	128 (36.2)	70 (36.1)	44 (38.9)	14 (29.8)
Associates degree	67 (18.9)	35 (18)	25 (22.1)	7 (14.9)
4-year degree	67 (18.9)	26 (13.4)	21 (18.6)	9 (19.1)
Other	10 (2.8)	5 (2.6)	3 (2.7)	2 (4.3)
Additional professional licensures/Certifications				
Certified medication aide	81 (22.9)	57 (29.4)	12 (10.6)	12 (25.5)
Certified medical assistant	50 (14.1)	25 (12.9)	17 (15)	8 (17)
Restorative nursing assistant	69 (19.5)	41 (21.1)	19 (16.8)	9 (18.1)
Activities or recreation director	26 (7.3)	8 (4.1)	13 (11.5)	5 (10.6)
Nurse (LPN, LVN, RN)	33 (9.3)	13 (6.7)	13 (11.5)	7 (14.9)
Nursing home administrator	31 (8.8)	15 (7.7)	9 (8.0)	7 (14.9)
Licensed social worker	13 (3.7)	8 (4.1)	4 (3.5)	1 (2.1)
Other	133 (37.6)	72 (37.1)	42 (37.2)	19 (40.4)
Length of time employed as nurse aide				
Less than 6 months	65 (18.4)	39 (20.1)	21 (18.6)	5 (10.6)
6 months to 1 year	56 (15.8)	29 (14.9)	22 (19.5)	5 (10.6)
1–3 years	74 (20.9)	36 (18)	33 (29.2)	5 (10.6)
4–6 years	77 (21.8)	25 (13)	30 (26.5)	12 (25.5)
6 years or more	205 (57.9)	125 (64.4)	51 (45.1)	29 (61.7)

Note. Percentages may not equal 100% due to rounding and/or non-reported answers. NHALF=Nursing Home or Assisted Living Facility Nurse Aide; ACS=Acute Care Setting Nurse Aide; HHIHC=Home Health or In-Home Care Nurse Aide.

ACS's felt their supervisor did not listen to them which may have contributed to reported feelings of a lack of support among management or supervisors (69.6% of NHALF's and 46.9% of ACS's).

Relationships With Residents. Of the 169 NHALF NAs, the majority (87.1%) reported that building relationships with residents was the best thing about the job. This was also reported by 47 (41.6%) of ACS and 43 (91.5%) of HHIHC NAs. Challenges in managing residents with memory impairments were reported by 9 (20.1%) NHALF's, 46 (40.7%) ACS's, and 30 (63.8%) HHIHC's. Similarly, challenges with residents with psychiatric or mental health conditions were reported by 50 (25.8%) NHALF, 45 (39.8%) ACS, and 35 (74.5%) HHIHC NAs.

Institutional Factors

Staffing and Schedules. Consistent schedules were favored by 52 (36.9%) of NHALF NAs but challenges

included insufficient staff (85.6%) and inconsistent assignments (53.1%). Among ACS NAs, 21 (26.6%) liked having consistent schedules while 79 (69.9%) reported challenges due to inadequate staff and unpredictable shifts. HHIHC NAs (39.4%) valued independence, yet 28 (59.6%) indicated having insufficient time per patient and 15 (31.9%) reported having unpredictable hours.

Policy Changes and Workplace Culture. NAs reported that challenges faced in NHALF's included frequently changing policies (51.5%), inconsistency in administration (54.6%), and negative workplace culture (52.1%). Among ACS NAs, many faced the same issues of changing policies (54%), administration inconsistency (47.8%), and negative workplace culture (39.8%), respectively. Additionally, HHIHC NAs highlighted challenges in changing policies (44.7%) and inefficient communication among supervisors (42.6%).

Table 4. Nursing Home or Assisted Living Facility (NHALF) Nurse Aides Experiences (n = 194).

Item	n (%)
Like most about the job	
Consistent schedule	52 (36.9)
Familiarity and predictability	17 (23.1)
Rarely need to work more hours than I want	11 (7.7)
Management cares about me	18 (13.2)
Direct supervisor cares about me	21 (13.3)
Co-workers care about me	20 (11.9)
Best things about the job	
Getting to know residents	169 (87.1)
Getting to know co-workers	83 (42.8)
Safer than home setting	108 (55.7)
Others are around in case of emergency	75 (38.7)
No travel compared to home health	92 (47.4)
More supplies than in a clients home	55 (28.4)
Challenging aspects of direct care tasks	
Not enough supplies (e.g., gloves)	74 (38.1)
Providing direct care to obese or bariatric residents	80 (41.2)
Providing urinary incontinence care	38 (19.6)
Physical injury or strain	124 (63.9)
Low quality equipment	58 (29.9)
Providing fecal incontinence care	31 (16)
Physically demanding	127 (65.5)
Not enough equipment	50 (25.8)
Challenging aspects of relationships	
Supervisors do not listen	115 (59.3)
Not enough staff to meet residents' needs	166 (85.6)
Disagreements with co-workers	31 (16)
Little to no support from management or supervisor	135 (69.6)
Resident family members or visitors	46 (23.7)
Residents with memory impairments	39 (20.1)
Residents with psychiatric or mental health conditions	50 (25.8)
Challenging aspects of workplace environment	
Unpredictable shifts	70 (36.1)
Inconsistent resident or hall assignments	103 (53.1)
Not enough orientation or training	87 (44.8)
Frequently changing company policies and rules	100 (51.5)
Inconsistency in administration	106 (54.6)
Overall culture of the workplace	101 (52.1)

Note. Percentages may not equal 100% due to rounding and/or non-reported answers.

Resources and Safety. NHALF NAs reported that safety (55.7%) was one of the best things about the job but faced challenges with low-quality equipment (29.9%) and insufficient training/orientation (44.8%). ACS NAs reported that safety (52.2%) and availability of supplies (40.7%) were generally positive, but 28.3% faced a lack of supplies. HHIHCs (59.6%) valued high-quality equip-

Table 5. Acute Care Setting (ACS) Nurse Aides Experiences (n = 113).

Item	n (%)
Like most about the job	
Consistent schedule	21 (26.6)
Familiarity and predictability	8 (11.0)
Rarely need to work more hours than I want	9 (11.4)
Management cares about me	10 (12.7)
Direct supervisor cares about me	12 (13.8)
Co-workers care about me	20 (20.2)
Best things about the job	
Getting to know residents	47 (41.6)
Getting to know co-workers	48 (42.5)
Safer than home setting	59 (52.2)
Less travel compared to home health	52 (46)
More supplies than in a clients home	46 (40.7)
Being with others in case of emergency	50 (44.2)
High quality equipment	34 (30.1)
Challenging aspects of direct care tasks	
Not enough supplies (e.g., gloves)	32 (28.3)
Providing direct care to obese or bariatric residents	60 (53.1)
Providing urinary incontinence care	28 (24.8)
Physical injury or strain	73 (64.6)
Low quality equipment	31 (27.4)
Providing fecal incontinence care	45 (39.8)
Physically demanding	63 (55.8)
Challenging aspects of relationships	
Supervisors do not listen	47 (41.6)
Not enough staff to meet residents' needs	79 (69.9)
Disagreements with co-workers	28 (24.8)
Little to no support from management or supervisor	53 (46.9)
Resident family members or visitors	36 (31.9)
Residents with memory impairments	46 (40.7)
Residents with psychiatric or mental health conditions	45 (39.8)
Challenging aspects of workplace environment	
Unpredictable shifts	46 (40.7)
Inconsistent resident or hall assignments	69 (61.1)
Not enough orientation or training	42 (37.2)
Frequently changing company policies and rules	61 (54)
Inconsistency in administration	54 (47.8)
Overall culture of the workplace	45 (39.8)

Note. Percentages may not equal 100% due to rounding and/or non-reported answers.

ment but reported a lack of supplies (40.4%) and working in challenging neighborhoods (40.4%).

Community Factors

Travel and Compensation. NHALF NAs reported that one of the best things about the job was not having to travel (47.4%), 46% of ACS NAs reported similar

Table 6. Home Health or In-Home Care (HHIHC) Nurse Aides Experiences ($n = 47$).

Item	n (%)
Like most about the job	
Independence or self-direction	13 (39.4)
Flexibility in schedule	4 (11.4)
Rarely need to work more hours than I want	2 (5.1)
Management cares about me	4 (11.1)
Direct supervisor cares about me	11 (26.8)
Best things about the job	
Getting to know the patient	43 (91.5)
New patients every day	23 (48.9)
High quality equipment	28 (59.6)
I can work with the client to adjust product purchases	27 (57.4)
Challenging aspects of direct care tasks	
Patient level of care	18 (38.3)
Not enough supplies (e.g., gloves)	19 (40.4)
Providing direct care to obese or bariatric residents	14 (29.8)
Providing urinary incontinence care	7 (14.9)
Physical injury or strain	26 (55.3)
Not enough equipment	12 (25.5)
Providing fecal incontinence care	13 (27.7)
Physically demanding	32 (68.1)
Challenging aspects of relationships	
Too many patients on case load	15 (31.9)
Not enough time with each patient before visiting next patient	28 (59.6)
Residents with memory impairment	30 (63.8)
Residents with psychiatric or mental health conditions	35 (74.5)
Family members or other visitors in the home	30 (63.8)
Challenging aspects of workplace environment	
Not enough reimbursement for travel time	30 (63.8)
Unable to communicate easily with the care team	20 (42.6)
Working in 'bad neighborhoods'	19 (40.4)
Expected to do tasks that require more than 1 person	36 (76.6)
Unpredictable hours	15 (31.9)
Frequently changing company policies and rules	21 (44.7)

Note. Percentages may not equal 100% due to rounding and/or non-reported answers.

thoughts. HHIHC NAs (63.8%) faced challenges due to inadequate reimbursement for travel time.

Resident Family/Visitors. Challenges in dealing with family members or visitors were reported by 23.7% of NHALF, 31.9% of ACS, and 63.8% of HHIHC NAs.

Job Demands. Most NAs reported physical injury or strain (63.9% of NHALF NAs, 64.6% of ACS NAs, and

55.3% of HHIHC NAs) and the physically demanding nature of the job (65.5% of NHALF NA, 55.8% of ACS NA, and 68.1% of HHIHC NA) as the most challenging aspects of direct care tasks. Providing urinary (19.6% of NHALF NA, 24.8% of ACS NA, 14.9% of HHIHC NA) and fecal (16% of NHALF NA, 39.8% of ACS NA, 27.7% of HHIHC NA) incontinence care was ranked relatively low among the most challenging aspects of NA direct care tasks.

Discussion

Results of this mixed-methods study reveal there are several factors that contribute to NAs' workplace experience and turnover. This research uncovered a nuanced assessment of NA workplace experience by organizing the research using the socio-ecological model including system-levels associated with workplace experience (Bronfenbrenner, 1979; McLeroy et al., 1988) and JD-R, exploring positive and negative aspects of being a NA (Demerouti et al., 2001).

Like earlier research on NA job experience, interpersonal level factors have been a long-standing issue, being considered both a job demand and a job resource. For instance, Trinkoff et al. (2013) described the relationships between NAs as a factor that ultimately contributed to workplace turnover. Additionally, the relationships between the NA and supervisor(s) in the nursing home were either a job demand or a job resource. For instance, research by Donoghue and Castle (2009) in (Blinded to maintain integrity of review process) reveal that "leaders who take input from staff" (p. 363) are likely to see less workplace turnover, suggesting this is a job resource for NAs. In contrast, Forbes-Thompson et al. (2006) found that staff perceptions of the nursing home administrator contributed to job demands or workplace dissatisfaction and intent to leave.

Another NA relationship that was found to be a job resource was getting to know residents in long-term care and getting to know patients in the community. These relationships were noted as the best thing about working as a NA across the care continuum. Recent research reveals that the relationships between NAs and residents/patients are mutual and bi-directional; not only are these relationships positive for staff members but they also increase the health and well-being of residents (Li et al., 2021; Weidner & Towsley, 2023).

Much of the existing literature on NA turnover focuses on workplace relationship and organizational culture (Bryant, 2017) or low salary/wages (PHI, 2022), which was consistent with the findings of this study. In addition to these consistencies, this research agrees with earlier work that explains NAs face the job demand of "Not enough staff to meet residents' needs" (ASPE, 2023). A job demand less frequently assessed that was found to be the most challenging aspects of NA work across the care continuum was physical

demand and physical injury or strain. Dreher et al. (2019) discussed the physical demands of working with residents including “standing, walking, and repositioning residents” (p. 305).

Limitations

There are several limitations of this study. First, only respondents who were a part of the membership organization (NAHCA) or social media users were invited to engage in the qualitative and quantitative portions of this study. As such, this reduces the generalizability of findings. Second, due to the online nature of this study, there may have inadvertently been fraudulent (e.g., unique participant fraud, alias fraud) participants. To mitigate this risk, the research team utilized CAPTCHA to incorporate bot-identification and efficacious approaches to data cleaning (i.e., duplicate IP address deletion). However, fraudulent responders are unavoidable and “will continue to improve methods to evade detection” (Goodrich et al., 2023, p. 775). Third, NAs worked in forty-four states, however it is difficult to determine regional variations in NA experiences. The federal mandate for NAs by the Centers for Medicare and Medicaid Services (CMS) requires a minimum of 75-clock hours of training (§CFR 483.152), however some states require training above the 75-hours. As such, training requirements may influence NAs desire to stay or leave the profession. Finally, this study was limited to NAs in the United States, thus limiting generalizability of the findings to an international audience.

Conclusions

This study provides insight into the workplace experiences of NAs across the care continuum, uncovering aspects of the job that have not largely been found in the literature before. These results suggest that by exploring NA workplace experiences through various socio-ecological levels of influence (Bronfenbrenner, 1979, McLeroy et al., 1988) and the JD-R model (Demerouti et al., 2001), a more nuanced understanding of across the care continuum may be revealed. While much of our findings are congruent with earlier work, these findings reveal that future research ought to consider specific care tasks. For instance, examining incontinence care tasks and dementia-related care tasks as they relate to NA workplace experience and turnover is warranted. As the population of NAs increases in coming years, an increased understanding of workplace experiences is necessary.

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Ethical Considerations

This manuscript includes findings from a study that was approved from Bowling Green State University’s Institutional Review Board (IRB). The IRB approval number associated with this project is IRBNet#:1880143-12.

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References

- 42 CFR 483.152. (2011). Requirements for approval of a nurse aide training and competency evaluation program. Centers for Medicare & Medicaid Services, Department of Health and Human Services. <https://www.ecfr.gov/current/title-42/section-483.152>
- AAPACN.org. (2021). Basics of Care for the Resident Who has Urinary Incontinence. AAPACN. https://www.aapacn.org/wp-content/uploads/2021/06/AAPACN_In-Service-Tool_Urinary-Incontinence_June.pdf
- AAPACN. (2023). *Basics of care for the residents who has urinary incontinence*. https://www.aapacn.org/wp-content/uploads/2021/06/AAPACN_In-Service-Tool_Urinary-Incontinence_June.pdf
- ASPE. (2023). *Nursing home nurse staff hours declined notably during the COVID-19 pandemic, with CNAs experiencing the largest decrease*. <https://aspe.hhs.gov/sites/default/files/documents/95b3a0f6294c7bb021c1cfbdc245cd9820/nh-nurse-staff-hours-brief.pdf>
- Banaszak-Holl, J., Castle, N. G., Lin, M. K., Shrivastwa, N., & Spreitzer, G. (2015). The role of organizational culture in retaining nursing workforce. *The Gerontologist*, 55(3), 462–471. <https://doi.org/10.1093/geront/gnt129>
- Bergman, A., Song, H., David, G., Spetz, J., & Candon, M. (2022). The role of schedule volatility in home health nursing turnover. *Medical Care Research and Review*, 79(3), 382–393.
- Britt, T. W., Shuffler, M. L., Pegram, R. L., Xoxakos, P., Rosopa, P. J., Hirsh, E., & Jackson, W. (2021). Job demands and resources among healthcare professionals during virus pandemics: A review and examination of fluctuations in mental health strain during COVID-19. *Applied Psychology*, 70(1), 120–149. <https://doi.org/10.1111/apps.12304>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Presidents and Fellows of Harvard College.
- Bryant, O. A. (2017). *Employee turnover in the long-term care industry* [Doctoral dissertation, Walden University].

- Candon, M., Bergman, A., Rose, A., Song, H., David, G., & Spetz, J. (2023). The relationship between scope of practice laws for task delegation and nurse turnover in home health. *JAMDA*, 24(11), 1773–1778.e2
- Castle, N. G. (2005). Turnover begets turnover. *The Gerontologist*, 45(2), 186–195.
- Castle, N. G. (2008). State differences and facility differences in nursing home staff turnover. *Journal of Applied Gerontology*, 27(5), 609–630.
- Castle, N. G., & Anderson, R. A. (2011). Caregiver staffing in nursing homes and their influence on quality of care: Using dynamic panel estimation methods. *Medical Care*, 49(6), 545–552.
- Castle, N. G., Hyer, K., Harris, J. A., & Engberg, J. (2020). Nurse aide retention in nursing homes. *The Gerontologist*, 60(5), 885–895.
- Centers for Disease Control and Prevention (CDC). (2022). *The social-ecological model: A framework for prevention*. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html#print>
- CMS.gov. (n.d.). *Glossary*. Certified Nursing Assistant (CNA). [https://www.cms.gov/glossary?page=14#:~:text=CERTIFIED%20NURSING%20ASSISTANT%20\(CNA\),dressing%2C%20and%20using%20the%20bathroom](https://www.cms.gov/glossary?page=14#:~:text=CERTIFIED%20NURSING%20ASSISTANT%20(CNA),dressing%2C%20and%20using%20the%20bathroom)
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Donoghue, C., & Castle, N. G. (2009). Leadership styles of nursing home administrators and their association with staff turnover. *The Gerontologist*, 49(2), 166–174.
- Dreher, M. M., Hughes, R. G., Handley, P. A., & Tavakoli, A. S. (2019). Improving retention among certified nursing assistants through compassion fatigue awareness and self-care skills education. *Journal of Holistic Nursing*, 37(3), 296–308.
- Forbes-Thompson, S., Gajewski, B., Scott-Cawiezell, J., & Dunton, N. (2006). An exploration of nursing home organizational processes. *Western Journal of Nursing Research*, 28(8), 935–954.
- Gandhi, A., Yu, H., & Grabowski, D. C. (2021). High nursing staff turnover in nursing homes offers important quality information. *Health Affairs (Project Hope)*, 40(3), 384–391. <https://doi.org/10.1377/hlthaff.2020.00957>
- Goodrich, B., Fenton, M., Penn, J., Bovay, J., & Mountain, T. (2023). Battling bots: Experiences and strategies to mitigate fraudulent responses in online surveys. *Applied Economic Perspectives and Policies*, 45(2), 762–784. <https://doi.org/10.1002/aep.13353>
- Grinnell, R., & Unrau, Y. (2011). *Social work research and evaluation: Foundations of evidence-based practice. All books and monographs by WMU Authors*. Western Michigan University. <https://scholarworks.wmich.edu/books/65>
- Habeger, A. D., Connell, T. D. J., Harris, R. L., & Jackson, C. (2022). Promoting burnout prevention through a socio-ecological lens. *Delaware Journal of Public Health*, 8(2), 70–75. <https://doi.org/10.32481/djph.2022.05.008>
- HRSA Health Workforce. (n.d.). *Health workforce projections: Nursing assistants and home health aides*. <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/direct-care-workers-factsheet.pdf>
- IBM Corp. (2021). *IBM SPSS statistics for windows, version 28.0*.
- Ingram, M., Wolf, A. M. A., López-Gálvez, N. I., Griffin, S. C., & Beamer, P. I. (2021). Proposing a social ecological approach to address disparities in occupational exposures and health for low-wage and minority workers employed in small businesses. *Journal of Exposure Science & Environmental Epidemiology*, 31, 404–411. <https://doi.org/10.1038/s41370-021-00317-5>
- Li, X., Dorstyn, D., Mpofu, E., Liam, O., Li, Q., Zhang, C., & Ingman, S. (2021). Nursing assistants and resident satisfaction in long-term care: A systematic review. *Geriatric Nursing*, 42(6), 1323–1331.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351–377.
- Miller, V. J., Maziarz, L., Wagner, J., Bell, J., & Burek, M. (2023). Nursing Assistant Turnover in Long-term Care: A Systematic Review of the Literature. *Geriatric Nursing*, 51, 360–368. <https://doi.org/10.1016/j.gerinurse.2023.03.02>
- Özdoğru, A. A. (2011) in *Encyclopedia of Child Behavior and Development*, Goldstein, S. & Naglieri, J.A. (Eds.). Springer: New York, NY. <https://doi.org/10.1007/978-0-387-79061-9>
- PHI. (2022). *Direct care workers in the United States: Key facts*. <http://www.phinational.org/wp-content/uploads/2022/08/DCW-in-the-UnitedStates-2022-PHI.pdf>
- Polenick, C. A., Struble, L. M., Stanislawski, B., Turnwald, M., Broderick, B., Gitlin, L. N., & Kales, H. C. (2020). “I’ve learned to just go with the flow”: Family caregivers’ strategies for managing behavioral and psychological symptoms of dementia. *Dementia*, 19(3), 590–605. doi:10.1177/1471301218780768
- Schaufeli, W. B. (2017). Applying the job demands-resources model: A ‘how to’ guide to measuring and tackling work engagement and burnout. *Organizational Dynamics*, 46, 120–132.
- Thapa, D. R., Stengård, J., Ekström-Bergström, A., Josefsson, K. A., Krettek, A., & Nyberg, A. (2022). Job demands, job resources, and health outcomes among nursing professionals in private and public healthcare sectors in Sweden – a prospective study. *BMC Nursing*, 21, 140. <https://doi.org/10.1186/s12912-022-00924-z>
- Trinkoff, A. M., Storr, C. L., Johantgen, M., Lerner, N., Han K., & McElroy, K. (2013). State regulatory oversight of certified nursing assistants and resident outcomes. *Journal of Nursing Regulation*, 3, 53–59. doi:10.1016/s2155-8256(15)30187-3
- U.S. Bureau of Labor Statistics. (2022a). *Nursing assistants and orderlies. Occupational outlook handbook*. <https://www.bls.gov/ooh/healthcare/nursing-assistants.htm#tab-6>
- U.S. Bureau of Labor Statistics. (2022b). *Occupational employment and wages, May 2021, 31-1131 nursing assistants*. <https://www.bls.gov/oes/current/oes311131.htm>
- Watkins, D. C. (2012). Qualitative research: The importance of conducting research that doesn’t ‘count’. *Health Promotion Practice*, 13, 153–158.
- Watkins, D. C. (2017). Rapid and rigorous qualitative data analysis: The “RADaR” technique for applied research. *International Journal of Qualitative Methods*, 16, 1–9. <https://doi.org/10.1177/1609406917712131>
- Weidner, M., & Towsley, G. L. (2023). Meaningful connections: An education program to enhance resident-certified nursing assistant relationships. *Gerontology & Geriatrics Education*. Advance online publication. <https://doi.org/10.1080/02701960.2023.2174116>