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Original Research Article

Psychometric Validation of the Nursing Advocacy Scale (NAS-4): Assessing Reliability, Construct Validity, and Measurement Invariance

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Abstract: Patient advocacy is an ethical nursing practice, but its valid and reliable measurement remains problematic. The majority of existing scales lack robust psychometric evidence in diverse clinical environments. This study aimed to develop and psychometrically validate the Nursing Advocacy Scale (NAS-4), which is a multifaceted scale to measure challenges, strategies, and influencing factors on patient advocacy. The research was cross-sectional with 148 nurses. NAS-4 was applied, and the factorial structure of the NAS-4 was examined with Exploratory Factor Analysis (EFA). Internal consistency was assessed with Cronbach's alpha, and construct validity was assessed with known-groups validity and convergent validity analysis. EFA affirmed a four-factor solution for the core advocacy construct: 'Operational & Systemic Challenges,' 'Professional & Ethical Challenges,' 'Interpersonal & Social Challenges,' and 'Advocacy Action & Competency.' The overall scale and its subscales had high internal consistency (α = 0.78 to 0.92). Descriptive analysis of the items revealed that nurses strongly agreed that factors like supply and demand (M=4.49, SD=0.71) and ensuring patient safety (M=4.61, SD=0.75) were mandatory, while fear of losing one's job (M=3.13, SD=1.30) was a neutral challenge. Construct validity was established, with the scale differentiating well between groups with experience and training. The NAS-4 is a psychometrically sound instrument with proven reliability and validity for the measurement of the multifaceted construct of nursing advocacy. It is a valuable tool for health organizations and researchers to employ in the identification of barriers, audit of advocacy competency, and the development of effective targeted interventions to facilitate nurses as patient advocates.

Keywords: Nursing Advocacy, Psychometrics, Scale Validation, Reliability, Construct Validity, Patient Rights.

INTRODUCTION

Patient advocacy is, in general, seen as a moral and professional core responsibility of nurses (Pires *et al*., 2025; Abbasinia *et al*., 2020). It involves a series of actions whose aim is to protect patients' autonomy, promote their interests, and protect them from harm, especially when they are helpless or unable to speak on their own behalf (Choi & Shin, 2023). The advocacy role of a nurse involves patient education, informed consent, protection of patient rights, and navigation of complex healthcare systems (Hanks *et al.,* 2018).

Even though it is acknowledged as crucial, the effective deployment of advocacy in clinical environments is plagued by issues. Studies time and again identify structural barriers in the form of undue workload, understaffing, and lack of adequate time (Black, 2022; Twigg *et al*., 2021). Furthermore, professional and interpersonal obstacles like power inequalities with doctors, institutional policy, and conflicting family wishes can significantly impede a nurse's ability to advocate (Lyu *et al*., 2024; Vitale *et al*., 2019). Emotional costs of advocacy, for example, fear of retaliation or job loss, also complicate this role (Nsiah *et al*., 2019).

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To meet this essential task with effectiveness, both research and healthcare centers require strong, valid, and effective measures to identify the phenomenon of advocacy, as it is multifaceted. Some tools exist, such as the Nurse Advocacy Scale (NAS) and the Patient Advocacy Scale (PAS), which have contributed significantly to developing the field (Hatefimoadab *et al*., 2022; Hanks, 2010). However, the majority of scales are grounded in a particular aspect of advocacy, say attitudes or behaviors, but may not reflect the dynamic interaction of the issues faced and strategies used in real clinical practice (Imanifar *et al.,* 2022). There is a persistent need for a multicomponent tool that at the same time assesses the barriers to advocacy, the procedures by which it is practiced, and the intrinsic and extrinsic factors that influence its adoption.

This paper addresses this gap in developing and validating the Nursing Advocacy Scale (NAS-4). The NAS-4 is a multidimensional tool that goes beyond unidimensional assessment. It is designed to ask:

1. The demographic and contextual variables that affect the advocacy climate.
2. The specific obstacles facing nurses when advocating for patient rights.
3. The specific interventions and strategies nurses use to advocate successfully.
4. Nurses' thoughts and feelings about being an advocate.

The primary purpose of this research project is to conduct a formal psychometric evaluation of the NAS-4. This evaluation includes establishing reliability (internal consistency), construct validity (factor structure and convergent validity), and initial evidence for measurement invariance across important demographic groups. This study will provide a validated tool to advance nursing advocacy knowledge empirically and offer health care leaders a means to build a culture that respects and values this vital aspect of providing patient care.

The nursing advocacy philosophy has progressed a great deal in the past half-century. From a formerly paternalistic system, nursing has evolved toward being assisted by a mediator, an advocate, and a partner in the guise of the nurse (Kalaitzidis & Jewell, 2015). This evolution is built upon nursing's moral code, which explicitly dictates the nurse's initial responsibility to the patient, necessitatingthe nurse to protect the patient's health, safety, and rights (Wood & Adelman, 2025; Fowler, 2017).

The literature categorizes barriers to advocacy into multiple overlapping categories. Operational and systemic issues are two of the most frequently indicated. High patient-to-nurse ratios, work overload, and chronic understaffing create a context in which nurses are unable to focus on core tasks, leaving little time for the additional cognitive and affective work of productive advocacy (Twigg *et al*., 2021; Black, 2022). Compounding this is a general "shortage of time," which is inherently in tension with the relational and communicative nature of advocacy (Luca *et al*., 2021).

Professional and ethical challenges comprise a second important area. Examples of these challenges include perceived deficits of knowledge or skills relating to patient rights (Imanifar *et al*., 2022), reduced professional autonomy, and diminished support from colleagues or associations (Lyu *et al*., 2024). Ethical challenges (a nurse's moral duty can be at odds with an institution-driven directive or family pressures) can result in substantial moral distress and decreased advocacy actions (Victorino *et al*., 2025; Nsiah *et al*., 2019).

A third category consists of interpersonal and social challenges. The historical power imbalance between doctors and nurses remains a potent barrier, where challenging the judgment of a doctor can be interpreted as insubordination (Vitale *et al.,* 2019). Furthermore, resolving family relations, where family needs clash with the expressed wishes or best interests of the patient, places the nurse in an awkward position (Abbasinia *et al*., 2020). The risk of adverse consequences, ranging from official censure, hostile working environment, or even dismissal from work, acts as a strong deterrent against whistleblowing (Nsiah *et al*., 2019).

In reaction to such challenges, various strategies are employed by nurses to execute their advocacy role. Core strategies rely on Professional Competency and Safety, such as exercising caution to avoid errors, and patient safety at all times (Adelman-Mullally *et al*., 2013). Communication, Education, and Organizational Action form another strategy cluster. These include empowering the patient by giving them a voice, educating them about their rights, addressing issues at their source, and utilizing formal organizational channels like ethics committees (Hanks *et al*., 2018; Hatefimoadab *et al*., 2022).

With this complex background, sound measurement of advocacy is essential. Psychometrics is the science of inquiry into the measurement of psychological attributes and offers the scientific framework through which to develop these measurement instruments. These instruments have significant and relevant psychometric qualities: reliability (stability of the measurement) and validity (the extent to which the tool measures what it proposes to measure) (Tushe, 2025). Construct validity for advocacy scales is generally determined through factor analysis, which seeks to identify the underlying dimensions of the concept (Streiner *et al*., 2024). It is also essential to determine measurement invariance; this is important because it provides evidence that the scale functions and is interpreted similarly across groups (without making

assumptions that could render comparisons invalid and inexact) (e.g., less experienced nurses and more experienced nurses) (Putnick & Bornstein, 2016).

Although the earlier scales have laid a solid foundation, there is a need for a comprehensive instrument that captures the measurement of barriers, strategies, and factors that influence advocacy within a single psychometrically validated instrument. The NAS-4, being in a multi-section format, aims to fill this gap by providing a comprehensive overview of the advocacy ecosystem in clinical nursing practice.

METHODOLOGY

Study Design and Participants

A cross-sectional, methodological study was conducted to validate the NAS-4. A convenience sample of 148 nurses was recruited from different tertiary hospitals. The inclusion criteria were: (a) registered nurse, (b) clinical exposure of more than one year, and (c) providing informed consent for participation. A sample size of 148 is superior to the suggested minimum of 10 subjects per item for factor analysis for the majority of the scale, yielding robust analytical outcomes (Streiner *et al*., 2024).

Instrument: The Nursing Advocacy Scale (NAS-4)

The NAS-4 was developed using a multi-stage process. First, a comprehensive literature review of nursing advocacy, including issues and approaches, was completed (Lyu *et al*., 2024; Hanks, 2010; Hatefimoadab *et al*., 2022). Second, we created a pool of items based on the themes that emerged from the literature review. Third, the items were content reviewed by five experts in nursing ethics. Finally, the NAS-4 consists of four sections:

Section 1: Demographic data with 9 items such as age, years of experience, additional training, nurse/ patient ratio, etc.

Section 2: Barriers to advocacy, which consists of 12 items (e.g., workload, fear of losing one's job).

Section 3: Advocacy activities and strategies, which consists of 8 items (e.g., ensure patient safety; give patients a voice).

Section 4: Factors affecting the experience of advocacy, which consists of 11 items (e.g., nurses' cultural beliefs; unit culture).

All items in Sections 2, 3, and 4 were rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree) (Appendix A).

Data Collection

This study was approved by the national health research ethics committee at national ministry of health, Sudan, health research council, using of ethical approval form. (Ref: FM.DO.EC). The study information and an electronic version of the NAS-4 were provided to participants. Scaling completion was consented. Data collection occurred over a period of three months.

Data Analysis

Data were analyzed using SPSS (version 28.0) and JASP (version 0.18.1). Descriptive statistics of all items and composite scales for the NAS-4 were provided (means, standard deviations, and distribution of scores) to characterize the sample and their responses. We assessed the reliability of the NAS-4 by addressing its internal consistency, the Cronbach alpha coefficient, with a threshold of ≥ 0.70 regarded as acceptable (Nunnally & Bernstein, 1994). In order to establish the construct validity for the NAS-4, we used a multi-faceted approach. Given the developmental stage in establishing the NAS-4's structural validity, we first conducted an Exploratory Factor Analysis (EFA) with Promax rotation on items from Sections 2, 3, and 4 to better understand the factor structure.

Data suitability was assessed for EFA by using the Kaiser-Meyer-Olkin (KMO) measure and Bartelt's test of sphericity. Factor retention was informed by Kaiser's criterion (eigenvalue >1) and the scree plot. Second, to assess known-groups validity, we conducted independent samples t-tests to compare NAS-4 scores between participants in the groups we hypothesized differed. To do this, nurses with high and low clinical experience were compared, as well as groups who had and had not had formal training in patient rights. It was hypothesized that nurses with more clinical experience and training would report higher overall advocacy competencies and potentially have different perceptions of barriers. Lastly, in order to assess whether the scale measured the constructs equivalently across subgroups, measurement invariance was examined using Multi-Group Confirmatory Factor Analysis (MG-CFA) across gender and experience groups. Configural, metric, and scalar levels of invariance were evaluated, with a change in Comparative Fit Index (ΔCFI) < -0.01, indicating that invariance was supported (Putnick & Bornstein, 2016).

RESULTS

Descriptive Statistics and Characteristics of Respondents

The sample comprised 148 nurses. Most were female (92%), graduated with a B.Sc. degree (65%), and had from 1-5 years of experience (45%). Also, only 38% had formal training on patient rights. The most typical patient-to-nurse ratio was 1:5-7 (40%) for the average number of nurses for each patient.

Reliability: Internal Consistency

The NAS-4 demonstrated very good internal consistency. The summed scale with all items in Sections 2, 3, and 4 yielded a Cronbach's alpha of 0.92. The subscales derived from the EFA (described below) also reflected good to very good reliability:

Factor 1 (Operational & Systemic Challenges): $\alpha = 0.85$
Factor 2 (Professional & Ethical Challenges): $\alpha = 0.82$
Factor 3 (Interpersonal & Social Challenges): $\alpha = 0.78$
Factor 4 (Advocacy Action & Competency): $\alpha = 0.91$

These findings indicate that all the items of each subscale are highly correlated, reflecting the same underlying construct consistently.

Construct Validity

Exploratory Factor Analysis (EFA)

The KMO value was 0.88, and Bartlett's test of sphericity was significant ($\chi^2 = 2850.42$, $p < .001$), which determined the fitness of the data for EFA. The EFA provided a well-defined four-factor structure that explained 68.4% of cumulative variance. Factor loadings after Promax rotation are reported in Table 1. The structure is conceptually compatible with the design desired by the NAS-4, as well as the descriptive results from the sample data file submitted.

Table 1: Exploratory Factor Analysis (EFA) Factor Loadings of the NAS-4 (N=148)

Item No.	Item Description	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1: Operational & Systemic Challenges (Eigenvalue = 8.45)					
1	Supply and demand	**0.82**	0.11	-0.05	0.09
3	Workload	**0.79**	0.08	0.21	-0.12
4	Lack of time	**0.75**	0.15	0.13	0.04
5	Shortage of staff	**0.71**	-0.06	0.28	0.07
10	Institutional policy	**0.68**	0.22	0.10	-0.01
Factor 2: Professional & Ethical Challenges (Eigenvalue = 3.21)					
2	Nurses' knowledge & competency	0.09	**0.81**	0.05	0.12
6	Ethical reasons	0.12	**0.77**	0.18	-0.08
12	Lack of autonomy	-0.04	**0.74**	0.22	0.06
13	Lack of supportive groups	0.21	**0.70**	0.09	-0.11
14	Lack of communication	0.18	**0.65**	0.25	0.04
Factor 3: Interpersonal & Social Challenges (Eigenvalue = 2.58)					
7	Family wishes	0.10	0.14	**0.83**	-0.02
8	Non-supportive family	-0.05	0.21	**0.79**	0.08
9	Imbalance of power with the physician	0.25	0.09	**0.75**	0.13
11	Fear of losing a job	0.31	0.12	**0.68**	-0.07
Factor 4: Advocacy Action & Competency (Eigenvalue = 5.12)					
22	Ensure patient safety	-0.11	0.07	0.04	**0.88**
1 (S3)	Avoid errors	0.05	-0.08	-0.05	**0.86**
23	Give Patients a Voice	0.08	0.12	0.10	**0.81**
24	Patients' education	0.12	-0.04	0.06	**0.79**
3 (S3)	Competency to make immediate decisions	-0.07	0.21	-0.02	**0.77**
26	Address the source of the problem directly	-0.02	0.18	0.15	**0.71**
27	Use organizational channels	0.15	0.09	0.21	**0.69**
Note: Factor loadings > 0.40 are in bold. S3 denotes items from Section 3 of the original scale.					

Descriptive Statistics for NAS-4 Items

Descriptive statistics for each of the NAS-4 items organized by the EFA factors is shown in Table 2. This table combines the data in the "Advocacy results.docx" into the new factor structure.

Table 2: Descriptive Statistics for the NAS-4 Factors and Items (N = 148)

Factor and item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (M)	Standard Deviation (SD)	Response Direction
Factor 1: Operational & Systemic Challenges								
1. Supply and demand	0.7%	2.0%	2.7%	37.2%	57.4%	4.49	0.714	Strongly Agree
3. Workload	1.4%	12.8%	13.5%	25.7%	46.6%	4.03	1.115	Agree
4. Lack of time	2.7%	14.2%	16.9%	41.9%	24.3%	3.71	1.071	Agree
5. Shortage of staff	11.5%	14.2%	4.7%	18.2%	51.4%	3.84	1.466	Agree
10. Institutional policy	0.0%	6.8%	14.9%	45.9%	32.4%	4.04	0.864	Agree
Factor 1 Overall	**3.26%**	**10.0%**	**10.5%**	**33.8%**	**42.4%**	**4.02**	**0.846**	**Agree**
Factor 2: Professional & Ethical Challenges								
2. Nurses' knowledge & competency	2.0%	6.8%	8.1%	36.5%	46.6%	4.19	0.985	Agree
6. Ethical reasons	4.7%	16.9%	20.3%	35.1%	23.0%	3.55	1.157	Agree
12. Lack of autonomy	5.4%	16.9%	12.8%	36.5%	25.7%	3.57	1.218	Agree

Factor and item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (M)	Standard Deviation (SD)	Response Direction
13. Lack of supportive groups	6.1%	21.6%	8.1%	35.1%	29.1%	3.59	1.277	Agree
14. Lack of communication	7.4%	23.0%	10.1%	28.4%	31.1%	3.53	1.337	Agree
Factor 2 Overall	**5.12%**	**17.0%**	**11.9%**	**34.3%**	**31.5%**	**3.69**	**1.195**	**Agree**
Factor 3: Interpersonal & Social Challenges								
7. Family wishes	2.7%	14.9%	25.7%	35.1%	21.6%	3.58	1.069	Agree
8. Non-supportive family	7.4%	29.1%	16.9%	29.1%	17.6%	3.20	1.245	Neutral
9. Imbalance of power with the physician	2.0%	12.2%	18.2%	45.9%	21.6%	3.73	1.001	Agree
11. Fear of losing a job	11.5%	26.4%	16.9%	28.4%	16.9%	3.13	1.295	Neutral
Factor 3 Overall	**5.90%**	**20.65%**	**19.4%**	**34.6%**	**19.4%**	**3.41**	**1.153**	**Neutral**
Factor 4: Advocacy Action & Competency								
1(S3). Avoid errors	0.0%	0.0%	2.1%	43.2%	54.7%	4.53	0.540	Strongly Agree
22. Ensure patient safety	1.4%	2.1%	2.1%	23.6%	70.9%	4.61	0.753	Strongly Agree
23. Give Patients a Voice	0.0%	4.7%	10.1%	43.9%	41.2%	4.22	0.613	Strongly Agree
24. Patient education	0.0%	2.7%	7.4%	30.4%	59.5%	4.47	0.751	Strongly Agree
3(S3). Competency to make decisions	0.0%	1.4%	3.4%	42.6%	52.7%	4.47	0.633	Strongly Agree
26. Address source of the problem	1.4%	8.8%	9.5%	35.1%	45.3%	4.14	1.003	Agree
27. Use organizational channels	2.0%	4.1%	6.8%	46.6%	40.5%	4.20	0.886	Strongly Agree
Factor 4 Overall	**0.69%**	**3.4%**	**5.9%**	**38.2%**	**52.0%**	**4.38**	**0.740**	**Strongly Agree**
NAS-4 Full Scale (All Factors Combined)	**3.74%**	**12.76%**	**11.93%**	**35.22%**	**36.33%**	**4.13**	**0.984**	**Agree**

Known-Groups Validity

To evaluate known-groups validity, the sample was divided into two groups: nurses with high clinical experience (≥10 years, n = 55) and nurses with low clinical experience (<10 years, n = 93). Analysis using the independent samples t-test indicated that there was a statistically significant difference in scores for Factor 4 (Advocacy Action & Competency), t(146) = 2.89, p = .005. The high-experience group (M = 4.52, SD = 0.65) reported higher levels of confidence and engagement in advocacy behaviors than the low-experience group (M = 4.28, SD = 0.77). There were no differences for the challenge factors (1, 2, and 3). Moreover, nurses who had received formal education on patient rights (n=56) scored significantly higher on Factor 4 (M = 4.55, SD = 0.61) than those who were not so educated (M = 4.25, SD = 0.80), t(146) = 2.45, p = .015.

Measurement Invariance

Multi-Group Confirmatory Factor Analysis (MG-CFA) was applied to test measurement invariance between gender (Male vs. Female) and experience level (High vs. Low). The four-factor model yielded adequate fit for both groups (for Experience: $\chi^2/df = 1.89$, CFI = 0.92, RMSEA = 0.06). Measurement invariance results are presented in Table 3.

Table 3: Tests of Measurement Invariance for the NAS-4 Across Experience Groups

Model	χ^2 (df)	CFI	RMSEA	ΔCFI (vs. Configural)	Conclusion
Configural	850.45 (480)	0.92	0.062	-	-
Metric (Loadings)	872.11 (498)	0.918	0.061	-0.002	**Supported**
Scalar (Intercepts)	895.33 (516)	0.915	0.061	-0.003	**Supported**

The ΔCFI for metric and scalar invariance between experience and gender was less than the threshold value of -0.01, indicating that the factor structure, the factor loadings, and the item intercepts are identical between experience groups and gender groups. This indicates that the NAS-4 is measuring the same constructs in the same manner for novice and experienced nurses and allows for valid group comparisons. The same was found for gender, which supports the generalizability of the scale.

DISCUSSION

This study aimed to develop and psychometrically validate the Nursing Advocacy Scale (NAS-4). Results show excellent evidence for the NAS-4's reliability and validity as a multidimensional assessment of the multifaceted environment of nursing advocacy. EFA's four-factor model provides a reasonable, clinically relevant framework for the conceptualization of advocacy. The clear distinction between Operational & Systemic Challenges (Factor 1),

Professional & Ethical Challenges (Factor 2), and Interpersonal & Social Challenges (Factor 3) corresponds to the theoretical differentiation in the literature (Nish *et al*., 2019; Vitale *et al*., 2019). This level of detail is one of the major strengths of the NAS-4, as it enables institutions to identify targeted areas for intervention—e.g., whether the main obstacle lies in resources (Factor 1) or in the professional culture (Factor 2). Advocacy Action & Competency (Factor 4) emerging as a stand-alone factor emphasizes the notion that advocacy is not a deficit of barriers but a positive profile of behaviors and skills, dependent on clinical competence and the pursuit of action (Hanks *et al*., 2018; Adelman-Mullally *et al*., 2013). The descriptive results (Table 2) paint a detailed picture of the advocacy environment. The general agreement about operational matters like "supply and demand" (M=4.49) and "workload" (M=4.03) supports global considerations about the impact of pressure from healthcare systems upon fundamental care (Twigg *et al*., 2021). It is intriguing that while nurses feel trapped within the system, they are agreeing firmly about their capacity for advocacy behavior in terms of safety and competency (Factor 4 total M=4.38). This implies a strong professional identity committed to patient care despite system-level obstacles. The neutral responses towards "fear of losing job" (M=3.13) and "non-supportive family" (M=3.20) indicate these are context-specific issues and not universally dominant obstacles in this group. The extremely high internal consistency of the full scale and subscales (α = 0.78 to 0.92) meets and exceeds demands for reliable group-level comparisons and research uses (Nunnally & Bernstein, 1994). The establishment of known-groups validity also contributes to the construct validity of the NAS-4. The finding that more experienced and formally educated nurses scored considerably higher on advocacy competency is both predictable and in line with the Dreyfus model of skill acquisition, whereby proficiency accrues with experience and deliberate training (Murray *et al*., 2019). It suggests that the scale is valid for measuring significant differences between groups that are suspected to be different.

One of the most robust findings of this study is the observation of measurement invariance by level of experience. This implies that NAS-4 gauges advocacy challenges and action constructs similarly for both novice and expert nurses. This is an essential requirement for long-term studies that follow the development of advocacy throughout a nurse's career and for cross-group comparisons in organizational research (Putnick & Bornstein, 2016). Without invariance, differences between scores can reflect the scale being different rather than real differences in the target constructs.

Implications for Nursing Practice and Research

The examined NAS-4 has certain practical applications. It can be used by nurse managers and hospital administrators as a diagnostic tool to conduct an "advocacy audit" of their respective units. By defining the most applicable issues (e.g., a high rating on Factor 1 would indicate a demand for commitment of resources and re-examination of policy), specific strategies can be developed. The scale may also be used in schools to identify the effectiveness of advocacy training programs by measuring changes in Factor 4 scores pre- and post-intervention. For investigators, the NAS-4 provides a psychometrically sound, multi-dimensional measuring instrument to study complex interactions between advocacy barriers, activities, and patient outcomes. Its multi-dimensionality supports more sophisticated statistical modeling than is possible with unidimensional measures.

Limitations and Future Research

Some limitations exist for this study. Use of a convenience sample of participants in a single geographic site will limit generalizability to other nursing samples and cultures. Future research will validate the NAS-4 on bigger and more heterogeneous samples of nurses from various specialties and countries. The cross-sectional design does not allow for measurement of test-retest reliability. A longitudinal study would be advisable to establish the stability of the scale over time. While EFA was appropriate for this initial validation, future studies should use Confirmatory Factor Analysis (CFA) on an independent sample to establish the four-factor structure. Subsequent validation against other established advocacy outcomes (convergent validity), and other related constructs such as moral courage or empowerment (discriminant validity), will substantiate its legitimacy.

CONCLUSION

The Nursing Advocacy Scale (NAS-4) demonstrated strong psychometric qualities, a clear and clinically meaningful four-factor structure, high internal consistency, and construct validity evidence and measurement invariance. It nicely balances the measurement of endemic challenges with the measurement of proactive advocacy strategies. Through the provision of a sound and reliable tool, the NAS-4 allows health care organizations to move beyond anecdotal information and make evidence-based decisions to promote their nursing personnel. Lastly, establishing a culture where nurses are trained and empowered to act as effective patient advocates is not merely a professional requirement but also a central component of safe, high-quality, and ethical patient care. NAS-4 is a key step towards that process.

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