

Validation of short version of evidence-based practice instruments among nurses in clinical practice: Evidence-based practice beliefs, implementation, and organizational culture

ABSTRACT

Objective: The objective of the study is to validate the short version of evidence-based practice (EBP) instruments among nurses in clinical practice.

Methods: An institutional-based cross-sectional research design was used and a stratified sampling technique to select 285 nurse clinicians. The study utilized a structured questionnaire comprising of demographic data from the participants and three validated scales: the shortened versions of the EBP Beliefs Scale, the EBP Implementation Scale, and the Organizational Culture and Readiness for System-Wide Integration of Evidence-Based Practice (OCSIEP) survey. With the use of descriptive statistics, the data were analyzed and presented in frequencies and percentages, while inter-item correlation coefficient (ICC) and the Kaiser-Meyer-Olkin measure of sampling adequacy were used to confirm the validity of using factor analysis.

Results: Findings revealed the mean scores of the EBP Beliefs Scale ranged from 1.50 to 1.61, EBP Implementation Scale ranged from 1.84 to 1.94, and the OCSIEP Scale ranged from 1.93 to 2.19. All the three shortened scales accordingly had good internal reliability, 29.30 ± 9.93 out of 80 for the EBP Beliefs Scale, 19.56 ± 7.37 out of 72 for the EBP Implementation Scale, and 66.32 ± 20.35 out of 125 for the OCSIEP Scale.

Conclusion: This study has generated a valid Short Version of EBP reliable instrument that is psychometrically robust that can be used by nurses and clinicians to evaluate EBP in clinical settings since the results presented as a whole confirmed the high reliability and factorial validity.

Keywords: Evidence-based practice beliefs, evidence-based practice instruments, implementation, organizational culture, short version, validation

INTRODUCTION

Evidence-based practice (EBP) revolves around making informed decisions using the best available evidence from multiple sources in a conscientious, explicit, and judicious manner. Systematically implementing EBP can enhance health-care safety and improve patient outcomes.^[1,2] The EBP process is established to help organizations achieve high reliability.^[3,4] Questionnaire-based instruments that measure various EBP dimensions such as knowledge, beliefs, attitudes, implementation, and organizational culture are essential tools for health-care providers. These instruments offer opportunities to identify strengths and areas for improvement in EBP implementation, leading to better patient care and outcomes.

A system-wide model known as the Advancing Research and Clinical Practice through Close Collaboration (ARCC®)


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model, developed by Melnyk and Fineout-Overholt over two decades ago,^[5] has proven effective in addressing and overcoming EBP barriers at the organizational level and sustaining practice change.^[6,7] Three scales from the ARCC[®] model have demonstrated validity and reliability in assessing key concepts: (a) the EBP Beliefs Scale;^[8] (b) the EBP Implementation Scale;^[9] and (c) the Organizational Culture and Readiness for Systemwide Integration of Evidence-Based Practice (OCSIEP).^[9] Researchers have used these scales in research and evidence-based quality improvement projects.^[10-12]

However, some EBP instruments are lengthy and can be challenging and time-consuming for health-care providers to administer. To address this issue, researchers have developed shorter versions of EBP instruments while continuing to refine and improve their accuracy and reliability. These short versions are particularly useful in busy clinical settings where time is limited. Moreover, excessively long surveys can burden respondents, potentially leading to increased nonresponse bias and reduced data quality.^[13,14] Validating short versions of EBP instruments is crucial to ensure their reliability, validity, and applicability across different populations and settings. Validity assesses the extent to which a measurement evaluates what it aims to measure and is categorized into content, construct, and criterion validity.^[15,16] Reliability, on the other hand, measures the stability of a questionnaire, test, or observation when measured repeatedly under different circumstances, producing consistent results. It indicates the consistency or stability of scores over time or across raters and is evaluated through internal consistency, inter-rater reliability, and test–retest reliability.^[17-19] Psychometric properties of a test, scale, or instrument are commonly described using single or multiple validity and reliability tests.

Despite the significance of measuring the accuracy and consistency of research instruments, such as validity and reliability, health science researchers in developing countries often neglect to conduct these assessments.^[15] Therefore, the aim of this study is to determine the psychometric properties (validity and reliability) of three shortened EBP scales adapted from longer scales (EBP Beliefs Scale, EBP Implementation Scale, and OCSIEP).

METHODS

Approval to conduct the study was given by the Institution Review Board of the Hospital and the Abakaliki Ethics Research Committee with the approval number EBY/AEFUTHA/0804/0091. All participants signed a consent form before participation and confidentiality of the information was guaranteed.

Study design, setting, and participants

This study utilized an institutional-based cross-sectional research design. The participants consisted of clinical nurses working in various units and wards, including Deputy Directors of Nursing Services/Assistant Directors of Nursing Services, Chief Nursing Officers, Assistant Chief Nursing Officers, Principal Nursing Officers, Senior Nursing Officers (SNO), and Nursing Officers. The study was conducted at the Federal Teaching Hospital in Abakaliki, Ebonyi State, Nigeria, known as Alex Ekwueme Teaching Hospital, Abakaliki. The sample size of 285 clinical nurses was determined using the Taro Yamane formula,^[20] out of a total nursing workforce of 991. Stratified random sampling was employed to distribute the questionnaires among the participants between May and November 2022. Participations who met the inclusion criteria were nurses in clinical practice and were present in the clinical setting during the period of the study. Clinical nurses on extended leave were excluded from the study.

Instruments

The structured questionnaires were administered to a study population of clinical nurses. The questionnaires included demographic questions and shortened versions of the three validated EBP scales adapted from the original longer version of the EBP Beliefs Scale,^[7] EBP Implementation Scale,^[8] and OCSIEP.^[9] Demographic information includes questions related to the participants' age, gender, marital status, years of experience, level of education, and job status.

Evidence-based practice beliefs (shortened scale)

The original version of the 16-item EBP Beliefs Scale was shortened to a three-item scale to measure a health practitioner's beliefs about the value of EBP and ability to implement it. The three items were pulled directly from the original scale without changes in wording. Participants responded on a five-point Likert-type scale with responses ranging from "1 = Strongly Disagree" to "5 = Strongly Agree." Experts supported the content validity of the shortened scale.

Evidence-based practice implementation (shortened scale)

The original version of the 18-item EBP Implementation Scale was shortened to a three-item scale to measure a health practitioner's ability to implement EBP. The longer version required the respondents to answer how often the items applied to them over the past 8 weeks (0 = 0 times, 1 = 1–3 times, 2 = 4–5 times, 3 = 6–7 times, and 4 = ≥8 times). This, however, was reviewed for the three items of the shortened scale as participants were asked to respond on a five-point Likert-type scale with responses ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

The wordings of the shortened scale items were not pulled verbatim but rephrased as follows: (1) I use evidence to improve patient outcomes in my health-care setting; (2) I implement the steps of the EBP process in my practice; and (3) I promote the use of EBP in my health-care setting to improve outcomes. Content validity was supported by experts in EBP.

Evidence-based practice organizational culture and readiness (shortened scale)

The original longer version of OCRSIEP survey was shortened to a three-item scale to measure organizational structures/resources to support EBP. Participants responded on a five-point Likert-type scale with responses ranging from 1 = Strongly Disagree to 5 = Strongly Agree. This was alternatively reviewed for the three items of the shortened scale as participants were asked to respond on a five-point Likert-type scale with responses ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The wordings of the shortened scale items were not pulled verbatim but rephrased as follows: (a) my organization has a culture that supports clinicians to implement EBP; (b) my organization has readily available resources to implement EBP; and (c) my organization provides EBP mentors to assist clinicians in implementing EBP. EBP experts supported the content validity of the shortened OCRSIEP Scale.

Statistical analysis

Descriptive statistics were used to summarize the participants' demographic characteristics and item scores for the three shortened EBP scales. The internal reliability of the instrument was assessed using Cronbach's alpha (α). Exploratory factor analysis (EFA) with principal components extraction was conducted to examine the factor structure of the respective three shortened EBP scales. The validity of using factor analysis was confirmed using inter-item correlation coefficient (ICC) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) software version 25 (IBM Corporation, Armonk, New York, United States).

RESULTS

Out of 285 participants who received the questionnaire, 251 were returned, giving a recovery rate of 88.1% (251/285) with a 100% effective rate. The average age of the nurses was 41 ± 8 years. The majority of the clinical nurses were female (86.9%), married (80.5%), held a bachelor's degree in nursing (57.4%), were SNO (27.1%), and had worked for 11–15 years (35.0%) [Table 1].

Table 1: Participant's general and sociodemographic characteristics (n=251)

| Characteristics | n (%) |
|----------------------------|------------|
| Gender | |
| Female | 218 (86.9) |
| Male | 33 (13.1) |
| Age (years) | |
| ≤30 | 28 (11.2) |
| 31–35 | 17 (6.8) |
| 36–40 | 92 (36.6) |
| 41–45 | 42 (16.7) |
| ≥46 | 72 (28.7) |
| Educational level | |
| Diploma | 88 (35.0) |
| Degree | 144 (57.4) |
| Masters | 17 (6.8) |
| PhD | 1 (0.4) |
| Others | 1 (0.4) |
| Position | |
| DDNS/ADNS | 25 (10.0) |
| CNO | 56 (22.3) |
| ACNO | 29 (11.5) |
| PNO | 43 (17.1) |
| SNO | 68 (27.1) |
| NO | 30 (12.0) |
| Marital status | |
| Single | 49 (19.5) |
| Married | 202 (80.5) |
| Working experience (years) | |
| <6 | 26 (10.4) |
| 6–10 | 63 (25.1) |
| 11–15 | 88 (35.0) |
| 16–20 | 60 (23.9) |
| >20 | 14 (5.6) |

DDNS: Deputy Director of Nursing Services, ADNS: Assistant Director Nursing Service, CNO: Chief Nursing Office, PNO: Principle nursing officer, ACNO: Assistant chief nursing officer, SNO: Senior nursing officer, NO: Nursing officer

Table 2 displays the average scores of the three shortened EBP scales based on individual items. The mean scores for the EBP Beliefs Scale ranged from 1.50 to 1.61, for the EBP Implementation Scale from 1.84 to 1.94, and for the OCRSIEP Scale from 1.93 to 2.19. Table 3 presents the internal consistency results obtained using Cronbach's alpha, with values of 0.898 for the shortened EBP Beliefs Scale, 0.897 for the shortened EBP Implementation Scale, and 0.857 for the OCRSIEP Scale. These findings indicate that all three shortened scales exhibit good internal reliability.

Moreover, Table 3 demonstrates that all the shortened instrument scales yielded satisfactory results in terms of the validity for conducting factor analysis, indicating their fitness for the EFA. The EBP Beliefs Scale and EBP Implementation Scale showed similar results for ICC (0.75) and KMO measure (0.74), respectively, while the OCRSIEP Scale had an ICC of 0.67 and KMO measure of 0.73. In all

cases, the control of sphericity (Bartlett's sign < 0.001) confirmed the meaningfulness of the principal component analysis, indicating that the item correlations were adequate for the analysis.

Furthermore, Table 3 includes the factor loading, eigenvalues, and variance explained by the one-factor model for the three shortened EBP scales. For the shortened EBP Beliefs Scale, the single factor had an eigenvalue of 2.49, accounting for 83.06% of the total variance, with all items on the scale

showing high factor loadings (>0.85). Similarly, the shortened EBP Implementation Scale's single factor had an eigenvalue of 2.49, explaining 83.04% of the total variance, with all items displaying high factor loadings (>0.75). Likewise, for the shortened OCRSIEP Scale, the single factor had an eigenvalue of 2.34, explaining 78.01% of the total variance, with all items showing high factor loadings (>0.85). Overall, the EFAs for each of the three shortened scales indicated a good one-factor structure.

DISCUSSION

EBP instruments, designed to assess professionals' attributes, play a vital role in an organization's or individual's EBP journey. While the principles of EBP have been adopted in various fields, including nursing,^[9,21] the widespread integration of research into nursing practice remains a complex global issue.^[22] Originally designed to evaluate EBP profiles across different professions and experience levels, having well-established, valid, and reliable EBP measurement tools are crucial, whether assessing an organization's current EBP status or conducting a study on EBP.

Construct validity is determined by correlating scores with another tool that examines the same construct. A clear construct structure and strong psychometric properties are essential for an instrument's usefulness and relevance.^[23] The results of this study strongly support the proposition that each of the shortened scales measures a unidimensional construct. Hence, the construct validity and reliability

Table 2: Mean and standard deviation of the shortened evidence-based practice scales (n=251)

| Shortened EBP scales items | Mean±SD |
|---|-----------|
| EBP beliefs (shortened version) | |
| I believe that EBP results is the best clinic care for patients | 1.50±0.97 |
| I am sure that I can implement EBP | 1.61±1.01 |
| I am sure that implementing EBP will improve the care that I deliver to my patients | 1.57±0.99 |
| EBP implementation (shortened version) | |
| I use evidence to improve patient outcomes in my health-care setting | 1.94±1.11 |
| I implement the steps of the EBP process in my practice | 1.91±1.14 |
| I promote the use of EBP in my health-care setting to improve outcomes | 1.84±1.09 |
| EBP culture and readiness (shortened version) | |
| My organization has a culture that supports clinicians to implement EBP | 1.93±1.11 |
| My organization has readily available resources to implement EBP | 2.12±1.16 |
| My organization provides EBP mentors to assist clinicians in implementing EBP | 2.19±1.25 |

EBP: Evidence-based practice, SD: Standard deviation

Table 3: Psychometric properties, factor loading, eigenvalues, and variance explained by the one-factor model

| Shortened EBP scales items | One-factor model factor loadings | Eigenvalue | Explained variance (%) | Cronbach's α | ICC | KMO | Bartlett's test of sphericity (χ^2 , df, P) |
|---|----------------------------------|------------|------------------------|---------------------|-------|-------|---|
| EBP beliefs (shortened version) | | | | | | | |
| I believe that EBP results is the best clinical care for patients | 0.893 | 2.49 | 83.06 | 0.898 | 0.745 | 0.735 | 467.556, 3, <0.001 |
| I am sure that I can implement EBP | 0.934 | | | | | | |
| I am sure that implementing EBP will improve the care that I deliver to my patients | 0.907 | | | | | | |
| EBP implementation (shortened version) | | | | | | | |
| I use evidence to improve patient outcomes in my health-care setting | 0.792 | 2.49 | 83.04 | 0.897 | 0.745 | 0.736 | 467.427, 3, <0.001 |
| I implement the steps of the EBP process in my practice | 0.828 | | | | | | |
| I promote the use of EBP in my health-care setting to improve outcomes | 0.870 | | | | | | |
| EBP culture and readiness (shortened version) | | | | | | | |
| My organization has a culture that supports clinicians to implement EBP | 0.876 | 2.34 | 78.01 | 0.857 | 0.670 | 0.727 | 345.202, 3, <0.001 |
| My organization has readily available resources to implement EBP | 0.904 | | | | | | |
| My organization provides EBP mentors to assist clinicians in implementing EBP | 0.870 | | | | | | |

EBP: Evidence-based practice, ICC: Inter-item correlations coefficient, KMO: Kaiser-Meyer-Olkin

of the shortened versions of the EBP Beliefs Scale, EBP Implementation Scale, and OCRSIEP Scale are well supported. Previous studies by Melnyk *et al.*^[8] and Utheim Grønvik *et al.*^[24] have also established a unidimensional factor structure for the EBP Belief Scale.

Notably, all the shortened scales demonstrated excellent internal consistency, with Cronbach's α values exceeding 0.85. These results align with related previous studies where Cronbach's alpha values were over 0.80 in different contexts.^[8,25-27] These values also correspond with the reliability values obtained in the original Fresno test study developed by Thorsteinsson^[25] and subsequent studies.^[28-32] As a result, clinical nurses and other health practitioners/researchers can confidently adopt the shortened scale instruments as reliable tools for assessing nurses' and health-care providers' beliefs about EBP, organizational culture and readiness for EBP, and the level of EBP implementation.

Factor analysis further supported the construct validity of each of the three shortened scales, with each demonstrating a good one-factor structure. A recent work by Melnyk *et al.*^[7] also showed favorable results in terms of item intercorrelations and KMO values. The Cronbach's α values for the three shortened EBP scales were 0.81 for the EBP Beliefs Scale, 0.89 for the EBP Implementation Scale, and 0.87 for the EBP Culture and Readiness Scale. When selecting an appropriate instrument, it is essential to ensure that the construct of interest is clearly defined and the instrument's development study performed in the target population, with subsequent psychometric testing on the same population.^[33]

Limitation

The limitation of this study includes the cross-sectional study design, which provides a snapshot of data at a specific point in time, the accuracy of response, and possible bias. Thus, more studies with different designs are necessary to further validate the instrument. Despite these limitations, the study provides valuable insights into the validity and reliability of the shortened scales for measuring EBP beliefs, EBP implementation, and organizational culture and readiness for EBP.

CONCLUSION

The finding from this study revealed that the short version of EBP is, in general, a valid and reliable instrument to measure various dimensions during nursing care to achieve better health outcomes. This study not only informs the nursing community of the availability of a valid and reliable assessment instrument but also showcases how aspects of

the validity and reliability of an assessment instrument are determined. Interestingly, the findings may offer a valuable resource for health-care organizations and researchers to assess and monitor EBP practices and beliefs among clinical nurses and other health-care providers.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Im EO, Kong EH. What is the status quo of evidence-based community health nursing? *Res Theory Nurs Pract* 2017;31:156-78.
2. Melnyk BM, Fineout-Overholt E, Giggelman M, *et al.* A test of the Arcc© model improves implementation of evidence-based practice, healthcare culture, and patient outcomes. *Worldviews Evid Based Nurs* 2017;14:5-9.
3. Pettis AM. Decreasing surgical site infections by developing a high reliability culture. *AORN J* 2018;108:644-50.
4. Oster CA, Deakins S. Practical application of high-reliability principles in healthcare to optimize quality and safety outcomes. *J Nurs Adm* 2018;48:50-5.
5. Melnyk BM, Fineout-Overholt E. *Evidence-Based Practice in Nursing And Healthcare*. 4th ed. Philadelphia, PA: Wolters Kluwer; 2019.
6. Speroni KG, McLaughlin MK, Friesen MA. Use of evidence-based practice models and research findings in magnet-designated hospitals across the United States: National survey results. *Worldviews Evid Based Nurs* 2020;17:98-107.
7. Melnyk BM, Hsieh AP, Gallagher-Ford L, *et al.* Psychometric properties of the short versions of the EBP beliefs scale, the EBP implementation scale, and the EBP organizational culture and readiness scale. *Worldviews Evid Based Nurs* 2021;18:243-50.
8. Melnyk BM, Fineout-Overholt E, Mays MZ. The evidence-based practice beliefs and implementation scales: Psychometric properties of two new instruments. *Worldviews Evid Based Nurs* 2008;5:208-16.
9. Melnyk BM, Fineout-Overholt E, Giggelman M, *et al.* Correlates among cognitive beliefs, EBP implementation, organizational culture, cohesion and job satisfaction in evidence-based practice mentors from a community hospital system. *Nurs Outlook* 2010;58:301-8.
10. Singleton JK. Evidence-based practice beliefs and implementation in doctor of nursing practice students. *Worldviews Evid Based Nurs* 2017;14:412-8.
11. Yoo JY, Kim JH, Kim JS, *et al.* Clinical nurses' beliefs, knowledge, organizational readiness and level of implementation of evidence-based practice: The first step to creating an evidence-based practice culture. *PLoS One* 2019;14:e0226742.
12. Gallagher-Ford L, Koshy Thomas B, Connor L, *et al.* The effects of an intensive evidence-based practice educational and skills building program on EBP competency and attributes. *Worldviews Evid Based Nurs* 2020;17:71-81.
13. Cunningham CT, Quan H, Hemmelgarn B, *et al.* Exploring physician specialist response rates to web-based surveys. *BMC Med Res Methodol* 2015;15:32.
14. Phillips AW, Reddy S, Durning SJ. Improving response rates and evaluating nonresponse bias in surveys: AMEE Guide No. 102. *Med Teach* 2016;38:217-28.
15. Streiner DL, Norman GR, Cairney J. *Health measurement scales: A practical guide to their development and use* (5th edition). *Aust N Z J Public Health* 2016;40:294-5.

16. Wong KL, Ong SF, Kuek TY. Constructing a survey questionnaire to collect data on service quality of business academics. *Eur J Soc Sci* 2012;29:209-21.
17. Cooper DR, Schindler PS. *Business Research Methods*. 9th ed. New York: McGraw-Hill; 2006.
18. Rothman KJ, Greenland S, Lash TL. *Modern Epidemiology*. 3rd ed. Philadelphia, USA: Lippincott Williams and Wilkins; 2008.
19. Dino Q, Thomas A, Amr G, *et al*. *Workload Optimized System: Turning POWER7 for Analytics*. New York: IBM Redbooks; 2012.
20. Yamane, T. *Statistics: An Introductory Analysis*. 2nd ed. New York: Harper and Row; 1967.
21. Boer K. Barriers to evidence based practice in doctors and nurses in Rwanda and Uganda. *Trop Med Int Health* 2012;17:3-80.
22. Khamarnia M, Haj Mohammadi M, Amani Z, *et al*. Barriers to implementation of evidence based practice in Zahedan teaching hospitals, Iran, 2014. *Nurs Res Pract* 2015;2015:357140.
23. Hadgu G, Almaz S, Tsehay S. Assessment of nurses perceptions and barriers on evidence based practice in Tikur Anbessa specialized hospital Addis Ababa Ethiopia. *Am J Nurs Sci* 2015;4:73-83.
24. Utheim Grønvik C, Ødegård A, Bjørkly S. Factor analytical examination of the evidence-based practice beliefs scale: Indications of a two-factor structure. *Open J Nurs* 2016;6:699-711.
25. Thorsteinsson HS. Translation and validation of two evidence-based nursing practice instruments. *Int Nurs Rev* 2012;59:259-65.
26. Wang SC, Lee LL, Wang WH, *et al*. Psychometric testing of the Chinese evidence-based practice scales. *J Adv Nurs* 2012;68:2570-7.
27. Ramos KD, Schafer S, Tracz SM. Validation of the Fresno test of competence in evidence based medicine. *BMJ* 2003;326:319-21.
28. Argimon-Pallàs JM, Flores-Mateo G, Jiménez-Villa J, *et al*. Psychometric properties of a test in evidence based practice: The Spanish version of the Fresno test. *BMC Med Educ* 2010;10:45.
29. Tilson JK. Validation of the modified Fresno test: Assessing physical therapists' evidence based practice knowledge and skills. *BMC Med Educ* 2010;10:38.
30. Lizarondo L, Grimmer K, Kumar S. The adapted Fresno test for speech pathologists, social workers, and dietitians/nutritionists: Validation and reliability testing. *J Multidiscip Healthc* 2014;7:129-35.
31. Silva AM, Costa LC, Comper ML, *et al*. Cross-cultural adaptation and reproducibility of the Brazilian-Portuguese version of the modified FRESNO test to evaluate the competence in evidence based practice by physical therapists. *Braz J Phys Ther* 2016;20:26-47.
32. Boström AM, Sommerfeld DK, Stenholms AW, *et al*. Capability beliefs on, and use of evidence-based practice among four health professional and student groups in geriatric care: A cross sectional study. *PLoS One* 2018;13:e0192017.
33. Terwee CB, Prinsen CA, Chiarotto A, *et al*. COSMIN methodology for evaluating the content validity of patient-reported outcome measures: A Delphi study. *Qual Life Res* 2018;27:1159-70.