The ACE-ERI: An Instrument to Benchmark EBP Readiness in Student and Clinician Populations

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Evidence-Based Practice (EBP) is a key component of healthcare quality improvement. Thus, there is a need for a workforce skilled in EBP and a need to track progress in EBP readiness, preparedness, and competencies. The purpose of this study was to estimate the psychometric properties of the ACE Evidence-Based Practice Readiness Inventory (ACE-ERI) in both student and clinical populations.

The ACE-ERI was developed to measure the ability to perform essential nursing competencies in EBP that were defined through a national consensus across five points on the ACE Star Model. Using self-efficacy as a basis, the competencies are presented in a visual analog/graphic rating scale. Five versions of the ACE-ERI were created and include basic, intermediate, and advanced levels for clinicians and students. The instrument is scored as a summated scale; yielding interval-level data.

In the development stage, the ACE-ERI demonstrated high reliability validity for an aggregate sample of students and clinicians (N=2380) using a one-group, cross-sectional design. The survey was administered via online survey to participating sites and, in about 15% of the cases, by paper-and-pencil. Each site selected a version that was appropriate to their institution. Reliability and validity of the instrument far exceeded expectations of a new research instrument: reliability coefficients exceeded .90 and various approaches to testing validity indicated significantly high validity.

The ability for the ACE-ERI to benchmark progress in EBP readiness was demonstrated using a clinical site that provided beside nurses with EBP educational resources. Using matched pre- and post-intervention scores from 111 nurse respondents, an independent t-test revealed that nurses gained higher self confidence in primary research competencies (p<0.01). Results suggest that the intervention created a measurable shift in the organizational culture to a focus on EBP in practice and supports the ability of the ACE-ERI to accurately assess essential EBP skills.