

The BARRIERS to Research Utilization Scale

OVERVIEW

For more than 25 years, the nursing literature has discussed the gap between the conduct of nursing research and the use of research findings to improve patient care and clinical practice. In 1987, the research team of Funk, Champagne, Tornquist, and Wiese, developed the BARRIERS Scale to assess clinicians', administrators', and academicians' perceptions of barriers to the utilization of research findings in practice. Items were derived from the literature, from research data, and from the CURN Project Research Utilization Questionnaire (Crane, Pelz, & Horsley, 1977).

The scale, consisting of 29 items, was tested with a sample of registered nurses (n=1,948) who were employed full time in nursing, 924 of whom held clinical positions. Standard psychometric analyses were performed on the instrument and replicated. These analyses are described in detail in Funk, Champagne, Tornquist and Wiese ("BARRIERS: The Barriers to Research Utilization Scale," *Applied Nursing Research*, 4, 39-45, 1991. It is recommended that those wishing to use the BARRIERS Scale read this article.

FACTOR STRUCTURE

Principal components analyses identified four factors on the scale: characteristics of the potential *adopter*, characteristics of the *organization* in which the research will be used, characteristics of the *innovation* or research, and characteristics of the *communication* of the research. The factors, their corresponding items and Cronbach's alphas are listed below.

FACTOR 1. CHARACTERISTICS OF THE ADOPTER: The nurse's research values, skills, and awareness. (8 items; alpha = .80)

- The nurse does not see the value of research for practice.
- The nurse sees little benefit for self.
- The nurse is unwilling to change/try new ideas.
- There is not a documented need to change practice.
- The nurse feels the benefits of changing practice will be minimal.
- The nurse does not feel capable of evaluating the quality of the research.
- The nurse is isolated from knowledgeable colleagues with whom to discuss the research.
- The nurse is unaware of the research.

FACTOR 2. CHARACTERISTICS OF THE ORGANIZATION: Setting, barriers and limitations. (8 items; alpha = .80)

- Administration will not allow implementation.
- Physicians will not cooperate with implementation.
- There is insufficient time on the job to implement new ideas.
- Other staff are not supportive of implementation.
- The facilities are inadequate for implementation.
- The nurse does not feel she/he has enough authority to change patient care procedures.
- The nurse does not have time to read research.
- The nurse feels results are not generalizable to own setting.

FACTOR 3. CHARACTERISTICS OF THE INNOVATION: Qualities of the research. (6 items; alpha = .72)

- The research has methodological inadequacies
- The conclusions drawn from the research are not justified.
- The research has not been replicated.
- The literature reports conflicting results.
- The nurse is uncertain whether to believe the results of the research.
- Research reports/articles are not published fast enough.

FACTOR 4. CHARACTERISTICS OF THE COMMUNICATION: Presentation and accessibility of the research. (6 items; alpha = .65)

- Implications for practice are not made clear.
- Research reports/articles are not readily available.
- The research is not reported clearly and readably.
- Statistical analyses are not understandable.
- The relevant literature is not compiled in one place.
- The research is not relevant to the nurse's practice.

SCORING

Scoring of the tool is specified in the original article about the tool that appeared in *Applied Nursing Research*: "BARRIERS: The Barriers to Research Utilization Scale," Vol. 4, pp. 39-45, 1991. This article delineates the four scales of the tool (characteristics of the nurse, the setting, the research, and its communication) and specifies the items to be included on each scale. Note that one item (Item #27) is not scored since it did not load on any of the four factors. It has been retained on the instrument, however, based on feedback from clinicians and administrators regarding its potential utility.

Scoring for each factor is quite simple -- for each individual, merely average [take the mean of] the responses to the items on the factor, eliminating those items for which the individual specified "no opinion" or left blank. (Thus, the appropriate divisor for the mean is the number of items with valid responses [i.e., scores of 1-4], not the total number of items on the scale.) If an individual responds "no opinion" for at least half of the items on a scale, you may wish to assign a "missing value" for the scale, since the scale score may be unstable.

VERSIONS

There are two versions of the scale available to researchers: (a) the original BARRIERS scale reported in *Applied Nursing Research*, 1991, which asks respondents to provide general perceptions of the barriers, and (b) a version that personalizes the instructions so the responses are provided in relation to the individual's own work setting. The scale has been sent to over 100 researchers, clinicians, administrators, and students over the past 10 years. It has been translated into German, Thai, Korean, and French and is presently being translated into additional languages. A psychometric database is being compiled from data returned by scale users.

DISTRIBUTION

The scale is now available for downloading from the Internet (see below). However, investigators are reminded that the scale is copyrighted and can only be duplicated or copied after submitting a signed permission form to Sandra G. Funk, PhD. Additionally, all requests for changes or alterations in the scale must be pre-approved by Dr. Funk.

We hope the BARRIERS tool will add to research on the utilization process, provide a guide for the development and evaluation of education and intervention programs, and foster communication between clinicians, researchers, and administrators. As the gap between research and its application is closed we believe that patient care will benefit.

SELECTED CITATIONS

(If you have published an article using the BARRIERS Scale or know of other articles reporting its use, please forward the citation to us and we will be happy to include it in this list.)

BY THE RESEARCH TEAM

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