

May 21, 2008

RE: NRES-D-08-00058, titled "Using the Practice Environment Scale of the Nursing Work Index on Asian Nurses Working in the United States"

Dear Dr. Cheng,

Recently you sent your manuscript for consideration by Nursing Research. The review of your manuscript is complete and the comments of the reviewers are listed below along with a checklist for style. Your reviewers make several important comments. Please address each of their concerns. In particular, address Reviewer #1's chief concern which is the combination of data from nurses from several Asian cultures. You may revise your manuscript based on the reviews and resubmit the manuscript to Nursing Research for further consideration. I will verify that this has been done upon receipt of the revised manuscript.

Please include with your revised submission an itemized, point-by-point response to the comments of the reviewers. The revisions should be completed by Aug 19, 2008 to avoid being considered as a new submission.

To submit a revision, go to <http://nres.edmgr.com/> and log in as an Author. You will see a menu item called "Submission Needing Revision." Please click on this item to obtain your submission record and begin the revision process.

Regards,

Molly C. Dougherty, PhD, RN, FAAN
Editor
Nursing Research

Reviewer Comments:

Reviewer #1: Manuscript Number: NRES-D-08-00058

Comments to the Author

This paper would be of interest to health professionals and researchers working with Asian nurses populations. My major concerns are the logic/ rationale does not seem to be sufficiently strong to support this study.

1. In the US, Asian nurses are from different Asian countries (e.g., Taiwan, China, Philippines, India, Pakistan, Korea, Japan...) with different cultural traditions, values, and beliefs. All of these beliefs and traditions influence their perceptions and behaviors toward needs of practice environment and job satisfaction. For instance, nurses from China or Taiwan or nurses from England or America may have different values and attitudes about their work environment even with the same spoken language. How is one instrument developed in the western culture applicable with different populations from substantially different culture backgrounds? How about the issue of "culture appropriateness" of this tool?

Here is another example to explain my points: one dress with a nice design that is supposed to be made for the American women and manufacturers ask people from another country to see if this pre-designed dress is pretty; then they claim this is the dress with the best

design for this particular population. Those people may think the dress itself is a nice dress but the design and size don't fit them well. If they have an opportunity to talk about their preferences on the design of dress, they may prefer having different dresses, which are designed to meet their needs and fit their size.

Applying the same instrument with people from different culture backgrounds doesn't make sense to me at all. The majority of the participants from this study are from Taiwan and the Philippines and I believe that the culture and value system between these two countries are substantially different. You need to provide good justifications for that.

2. There needs to be further description of the conceptual framework used and how this guided the development of the scale. It did not seem as though you had explored much of the literature in the background of this study. The relevant literature must be added into this session to clearly demonstrate that your study addresses a gap in the literature.
3. A comprehensive review of nursing environment scales would be useful to demonstrate the scales are currently available to measure the same concepts and their limitations; and what are the pros and cons to adopt the PESNWI in this study?
4. It's appropriate to use exploratory factor analysis in the study, but the method used to retrieve the factor needs to be clearly stated; was it based on the eigen value? or others?
5. 5% of the total variance (commonly used as a cut-off point) contributed by a factor is to be evaluated as substantially significant. In this study, the explained variances for 4 out of 5 factors were ranged from 2% to 4% but still retained in the results. A justification is needed here to support your results.
6. It's appropriate to use 0.3 criteria to indicate which items loaded on which factors; however, the items did not load cleanly (cross loading). This could be a warning that there was a problem with the number of factors retained or inadequate validity of this scale for this particular population. This issue needs to be addressed.
7. As to Table 2 & Table 3, the items with their respective factors in this study were different from the original tool. What are rationales to do these comparisons between these 2 tools? What are the purposes to compare mean differences of each factor between 2 tools?
8. The authors state that inter-item correlations and mean inter-item correlations overall ranges for each factor. Is this a good result? A comment is necessary.
9. What is the statistical power in this study? Please provide a statement about determining sample size in this study.

Reviewer #2: This manuscript tests the reliability and validity of the use of the Practice Environment Scale of the Nursing Work Index (PES-NWI; Lake, 2002) with Asian Nurses working in the US. Given the nursing shortage, the large number of Asian nurses working in the US, and the cultural differences between the Americans and Asian, this is a worthwhile study. The author(s) could strengthen the case of the need for the study by giving more information on the number and location (geographical as well as specialty areas) of the Asian nurses working in the US.

The study is well designed and carried out. A suggestion for improvement would be to state the justification for changing the change of the Likert scale from 5 points to 4 points as mentioned in a note to Table 1.

In reporting the results, some confusion exists on how the author(s) assigned items to factors. In the original factor analysis reported in Table 1 and discussed on page 6 (lines 1-12) , the authors assigned items to the factor with the highest loading, even though the loading on an item may have been greater than .30 on two factors. Then the author(s) recategorized items in Factors I and V based on conceptual clarity and the results of the Lake Study (page 6, lines 13-22). On the first read, this process was difficult to follow. Additionally, Table 1 and the text (page 6, lines 10-11) report the percent of variance explained for the original factor analysis, but then the variance explained for the recategorized factors is never stated. Finally, Table 1 report the correlation between the recategorized factors, but the author(s) to not report that information in the text. This confusion continues in the discussion section when the author(s) use the term "reconstructed" (page, 8, line 6). Do the terms "reconstructed" and "recategorized" mean the same thing? On the other hand, were Factors I, II, and III "reconstructed" and factors I and V "recategorized?"

Another technique used to compare the similarity of factor structures when using two different samples is the Coefficient of Congruence.¹ The authors might want to add that information to support the fact that the PES-NWI is measuring the same constructs with both samples.

A limitation of the study is that the sampling techniques seem to have resulted in only hospital nurses (though the author(s) does not report the work setting of the nurse). Lake (2002) developed the instrument using hospital nurse, so the method of sampling is appropriate, but I suspect that many Asian nurses work in other settings, such as long-term care, mental health, and home health. Perhaps the author(s) can discuss this issue, especially if the demographics of Asian nurses working in the US support this supposition.

1 References:

Armenakis AA, Field HS, Wilmoth JN. An algorithm for assessing factor structure congruence. *Educ and Psy Meas* 1977; 37: 213-217.

Teel C, Verran JA. Factor comparison across studies. *Res in Nurs & Health* 1991; 14: 61-72.

CHECKLIST FOR STYLE

Title Page:

Shorten title to 12 words or less (no abbreviations).

Revise running head to less than 50 characters (no abbreviations).