Title:
TIGER-Based Assessment of Nursing Informatics Competencies (TANIC)

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Session Title:
Nursing Informatics
Slot:
6C: Saturday, April 5, 2014: 11:45 AM-12:30 PM
Scheduled Time:
11:45 AM

Keywords:
Competencies, Nursing informatics and informatics research

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
<th>TIME ALLOTTED</th>
<th>FACULTY/SP EAKER</th>
<th>TEACHING/LE ARNING METHOD</th>
<th>EVALUATION/FEEDBACK</th>
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<tbody>
<tr>
<td>Example</td>
<td>Example Definitions of &quot;curriculum&quot; • Course of study • Arrangements of instructional materials • The subject matter that is taught</td>
<td>Example 20 minutes</td>
<td>Example Name, Credentials</td>
<td>Example Lecture PowerPoint presentation Participant feedback</td>
<td>Example Group discussion: What does cultural training mean to you?</td>
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Abstract Text:

Problem

Decision making requires data, information, knowledge, and wisdom in today's data- and technology-rich environments. Nurses need nursing-informatics (NI) competencies to support their decision making. The TIGER Initiative published NI competencies for all nurses, encompassing basic computer skills, information literacy, and clinical-information management. Reliable, valid measures to assess these competencies are lacking.
This research aimed to develop a reliable, valid online instrument for self-assessment of perceived NI competencies based on the TIGER competencies.

Methods

Instrument development involved concept definition, establishing the objective, and identification of items. Three competency scales were created: basic computer, information literacy, and clinical-information management. Three external NI experts independently confirmed retention of all items in each scale. Items were rewritten with behavioral verbs. Three external NI experts assessed content validity of each scale.

The TIGER-based Assessment of Nursing Informatics Competencies© (TANIC) was piloted with members of an online NI discussion forum.

Results

The sample of 168 respondents was predominantly female nurses, 26-70 years of age, with a master's degree in nursing and 2-5 years of NI practice but not certified.

Content validity, internal-consistency reliability, and a factor analysis were calculated. Mean scores on a scale of 1 to 4 were: basic-computer competencies (3.975), information-literacy competencies (3.226), and clinical-information-management competencies (3.358). Reliability coefficients for the 3 scales ranged from 0.948 to 0.980. Specific results for each scale and the instrument as a whole will be shared.

Conclusions

TIGER competencies establish a foundation for developing a self-assessment of perceived NI competencies. The TIGER competencies required revision to incorporate measurable behaviors. After review and revisions, the instrument demonstrated acceptable content validity.

Pilot tests of the instrument demonstrated reliability and usability. Initial data analysis reveals the instrument can discriminate different levels of competencies. Results from using this instrument can guide educators in all settings in developing curricula for building nursing informatics competencies.