Psychometric Properties of the Transition Shock Scale for Newly Graduated Nurses

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Background

• Transition shock is defined as the difficulty that newly graduated nurses experience during transition from student to nurse.

Purpose

The purpose of this study was to evaluate the psychometric properties and the discriminant ability of the Transition Shock Scale for Newly Graduated Nurses developed by Kim et al. (2017).

Methods

Design: A psychometric evaluation

Subjects: Survey data were collected from 317 newly graduated nurses in 5 hospitals in South Korea.

Data Analysis: Data were analyzed using descriptive statistics, Pearson correlation, paired t-test, receiver operating characteristics (ROC) curve.

Results

Characteristics of Participants

The mean age of participants was 22.8 ± 2.2 years and the majority (90.7%) were female. Of all study participants, 72.8% reported permanent employment. Working units included 55.4% general units and 44.6% special units (such as intensive care units, emergency rooms, and operating rooms).

Concurrent Validity

To test concurrent validity, we used Pearson correlation analysis to analyze the correlation of the Transition Shock Scale for Newly Graduated Nurses with Environmental Reality Shock-Related Issues and Concerns instrument (Kramer et al., 2013).

<table>
<thead>
<tr>
<th>Transition Shock</th>
<th>t or r (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental reality shock</td>
<td>.71(&lt;.001)</td>
</tr>
<tr>
<td>Turnover intention</td>
<td></td>
</tr>
<tr>
<td>Yes (n=64)</td>
<td>3.3 ± 0.4</td>
</tr>
<tr>
<td>No (n=248)</td>
<td>2.7 ± 0.4</td>
</tr>
</tbody>
</table>

Discriminant Validity

Discriminant validity showed a significant difference in degree of transition shock experienced by newly graduated nurses at 4 months (2.79 ± 0.50) and 8 months (2.17 ± 0.49) post hire (t = 10.13, p < .001).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>4 month</th>
<th>8 month</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score of transition shock</td>
<td>2.79 ± 0.5</td>
<td>2.17 ± 0.4</td>
<td>10.1</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Conflict between theory and practice</td>
<td>2.83 ± 0.5</td>
<td>2.15 ± 0.5</td>
<td>11.5</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Overwhelming workload</td>
<td>2.86 ± 0.6</td>
<td>1.99 ± 0.6</td>
<td>11.6</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Loss of social support</td>
<td>2.25 ± 0.7</td>
<td>2.67 ± 0.7</td>
<td>-4.8</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Shrinking relationship with co-workers</td>
<td>3.06 ± 0.7</td>
<td>1.93 ± 0.7</td>
<td>13.8</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Confusion in professional nursing values</td>
<td>2.80 ± 0.6</td>
<td>2.19 ± 0.6</td>
<td>8.2</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Incongruity in work and personal life</td>
<td>2.64 ± 0.8</td>
<td>2.38 ± 0.8</td>
<td>2.7</td>
<td>.007</td>
</tr>
</tbody>
</table>

Predictive Validity

To test predictive validity, the correlation between transition shock and turnover was assessed using multiple regression analysis. The transition shock significantly predicted turnover while controlling for the characteristics of participants.

<table>
<thead>
<tr>
<th>Transition shock</th>
<th>β</th>
<th>SE</th>
<th>OR</th>
<th>96% CI</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.39</td>
<td>.61</td>
<td>4.03</td>
<td>1.21-13.34</td>
<td>.023</td>
</tr>
</tbody>
</table>

Sensitivity and Specificity

ROC curve analysis showed area under ROC was .85 (95% CI: .79-90, p < .001) and identified the optimal cut-off point as 3.0 (sensitivity 79.7%, Specificity 78.2%).

Conclusion

We confirmed that the Transition Shock Scale for Newly Graduated Nurses has satisfactory validity and usefulness to measure the transition shock of newly graduated nurses in South Korea. Our findings indicate that the Transition Shock Scale for Newly Graduated Nurses is a valuable tool for use in nursing practice and research to assess the transition shock of newly graduated nurses. Given the importance of retaining newly graduated nurses in their jobs and the profession, this use of this scale can provide insights to guide the development and tailoring of interventions that are more specific to their concerns.