Measuring the Effect of a Nurse Residency Program on Person-Organizational Enculturation

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Disclosure & Learning Objectives

• The authors have no conflicts of interest to declare
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• Learner Objectives
  1. Identify program elements of NRP as identified in a review of the literature.
  2. Evaluate the importance in reflective learning in NRP to enhance organizational commitment.
  3. Apply the findings of this study in the design and development of a NRP at the participant’s hospital.
Setting – About Our Hospital

- Part of 7 hospital integrated healthcare system
- 368 staffed beds
- 18,000 annual admissions
- Magnet designated, 2008, 2013, 3rd pending
- Planetree designated, 2012, 2015, distinction in 2014
- HRO Journey
- NRP established in 2010
Study Background

• New graduate nurses (6%) leave the profession within their first year of practice due to:
  o Job dissatisfaction
  o Poor transition from the student role to the work environment
  o Poor social integration within the work unit
  o Concerns about their competency level
  o Poor coping and self-efficacy (Kramer, Halfer, Maguire & Schmalenberg, 2012)

• Nurse Residency Programs (NRPs) are an effective way to prepare new graduate nurses for work in the complex health care environment (Al-Dossary, Kitsantas & Maddox, 2016; Bratt, 2013; Bratt & Felzer, 2012; Green, Warren & Perkins, 2016).
Study Significance

Specific attributes of NRPs facilitating nurses’ integration into an organization and the work unit have not been measured for effectiveness in facilitating the *enculturation* and *retention* of the new graduate nurse.
<table>
<thead>
<tr>
<th>Level</th>
<th>Evaluation</th>
<th>Evaluation Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reaction</td>
<td>Nurse residents complete course evaluations and program instructors are given feedback</td>
<td>Course/event evaluations</td>
</tr>
<tr>
<td>2</td>
<td>Learning</td>
<td>Program manager/instructors evaluate participant learning at the time of learning events/activities</td>
<td>Observation, case study discussion, reflective learning, journaling, debriefing</td>
</tr>
<tr>
<td>3</td>
<td>Behavior</td>
<td>Program manager, unit manager and CNS review completion of clinical competencies (how knowledge, skills and attitudes are applied and transferred to the practice setting).</td>
<td>Competency pathway, new hire conferences, observation, document review</td>
</tr>
<tr>
<td>4</td>
<td>Results</td>
<td>Program effectiveness is evaluated through research study and other program outcome measures</td>
<td>Predetermined outcome measures: turnover (2010-2017 = 2.8%), research study</td>
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To describe the effects of a structured Nurse Residency Program (NRP), featuring reflective learning, on nurses’ organization enculturation from Year 1 (Y1) to Year 2 (Y2).
Nurse Residency Program

- Evidence-Based Curriculum
- Dedicated Nurse Manager; NGN hired into the NRP rather than an assigned unit (until 2017)

- One year in length; 16 week clinical orientation
  - Cohort relationships
  - Looping (LOC/IP)
  - Reflective Practice (debriefing, case studies, journaling)
  - Mentoring
  - Celebrations and recognition
  - Post orientation professional development days
Methods

• **Questionnaire**
  - 82 items with 5-point response set (5 = SA to 1 = SD).
  - 11 demographic items to describe samples in Y1 and Y2
  - Additional 14 items provided more information about NR in Y2

• **Total Respondents:**
  - 105 in Y1 & Y2 from a population of 129 NGN

• **Response rate of:**
  - 82% in Y1
  - 19% in Y2

[IRB Approved stamp]
### Instruments/Items

<table>
<thead>
<tr>
<th>Scale/Items</th>
<th>Acronym</th>
<th>Scale/Items</th>
<th>Acronym</th>
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</thead>
<tbody>
<tr>
<td>Person-O rganizational Fit</td>
<td>POF</td>
<td>Social Support</td>
<td>SS</td>
</tr>
<tr>
<td>Coping Self- Efficacy</td>
<td>CSE</td>
<td>Knowledge &amp; Skills</td>
<td>K&amp;S</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Org Com</td>
<td>Organizational Citizenship Behaviors</td>
<td>OCB</td>
</tr>
<tr>
<td>Civility Norms</td>
<td>CIV</td>
<td>Occupational Commitment</td>
<td>Occ Com</td>
</tr>
<tr>
<td>Burnout</td>
<td>BO</td>
<td><strong>All scales had reliabilities ($a = .70$) in Y1 &amp; Y2 (except Org Com scale, $a = .67$ in Y2)</strong></td>
<td></td>
</tr>
</tbody>
</table>
Data Analysis

Data analyzed with SPSS v 24

- Matched pair $t$-tests to measure differences in Y1 to Y2 ($n = 16$)
- Independent $t$-tests to measure differences in Y1 ($n = 105$) and Y2 ($n = 24$)
- Entire sample analyzed to determine correlations among variables in Y1 & Y2
## Sample - Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Education</th>
<th>Job Title</th>
<th>Prior SMH Work Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>81% Female</td>
<td>75% BSN</td>
<td>Y1</td>
<td>39% of sample had prior work experience at same organization:</td>
</tr>
<tr>
<td>19% Male</td>
<td>15% MSN Entry</td>
<td>70% Clinical Associate (CA), 30% Clinical Nurse (CN)</td>
<td>• Nursing Assistants</td>
</tr>
<tr>
<td></td>
<td>10% ADN (enrolled in ADN to BSN)</td>
<td>Y2</td>
<td>• Healthcare Partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18% (CA)</td>
<td>• Unit Clerks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73% (CN)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9% no response</td>
<td></td>
</tr>
</tbody>
</table>
### Results for Matched Pairs

No significant differences in Y1 to Y2 (p = .10) in Org Com, OCB, CIV, Occ Com & BO

<table>
<thead>
<tr>
<th>Significant Improvements</th>
<th>Significant Declines</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>CSE</strong> (M1 = 3.60, M2 = 3.87; p &lt; .015)</td>
<td>• <strong>POF</strong> (M1 = 4.31, M2 = 4.02; p &lt; .038)</td>
</tr>
<tr>
<td>• <strong>K&amp;S</strong> (M1 = 3.13, M2 = 3.30; p &lt; .060)</td>
<td>• <strong>SS</strong> (M1 = 3.31, M2 = 3.09; p &lt; .041)</td>
</tr>
</tbody>
</table>
Results for Independent Samples

• NS differences in Y1 (n = 105) to Y2 (n = 24) (p = .05) age, gender, job title, degree or shift

• Significant differences noted in Y1 & Y2 (assuming unequal variances for group sizes)
  o The mean scores for **Org Com** decreased from Y1 (M = 4.45) to Y2 (M = 4.10, p = .003);
  o **POF** (Y1, M = 4.44; Y2, M = 4.15, p = .05);
  o **SS** (Y1, M = 3.45; Y2, M = 3.23, p = .04). Significant declines noted
Results for Independent Samples

Job Title
• Clinical Associate nurses rated CIV significantly higher ($M = 4.18$) than Clinical Nurses ($M = 3.89$) at Y1 ($p < .05$), but that difference was not observed in Y2.

Shift
• NRs working the day shift reported higher SS ($M = 3.57$) than those working evenings/nights ($M = 4.36$) at Y1 ($p < .01$)

Prior Experience with the Hospital
• Higher Org Com ($M = 4.71$) than those who did not have prior employment ($M = 4.39$) at Y1 ($p < .05$), but that difference was not observed in Y2.
• Higher perceived POF ($M = 4.67$) at Y1 as compared to those who did not have prior experience ($M = 4.34$, $p < .05$), but that difference was not observed in Y2.
Significant Correlations \( (p = .05) \)

**Positive Correlations**
- **Org Com** and **Occ Com** (\( Y_1, r = .632, p \leq .01 \) and \( Y_2, r = .632, p \leq .01 \));
- **POF** and **Org Com** (\( Y_1, r = .613, p \leq .01 \) but not significant in \( Y_2 \));
- **SS** and **Org Com** (\( Y_1, r = .487, p \leq .01 \); \( Y_2, r = .766, p \leq .01 \));
- **SS** and **CSE** (\( Y_1, r = .236, p \leq .01 \); \( Y_2, r = .50, p \leq .01 \))

**Negative Correlations**
- **SS and BO** were noted in \( Y_1 \) (\( r = -.345, p \leq .01 \)) and \( Y_2 \) (\( r = -.602, p \leq .01 \)).

**SS** and all other study variables were higher in \( Y_2 \) as compared to \( Y_1 \) except **SS** and **POF** (NS in \( Y_2 \)).
Regression Analysis

- Regression analysis performed to determine strongest predictor of organizational commitment (dependent variable - all other study variables were independent variables)
  - \( R^2 = .587, \ p = .000 \)

- Strongest predictors of organizational commitment:
  - **Occ Com** \( (B = .315, \ p = .000) \)
  - **POF** \( (B = .394, \ p = .000) \)
Study Limitations

- Single-site study
- Non-experimental design; convenience sample
- Selection bias (voluntary completion of surveys)
- Response rate
  - Unequal group sizes from Y1 to Y2
  - Attrition in Y2 when nurse residents were fully in their home units and shifts with no structured cohort meetings
  - Small number of matched pairs
  - Questionnaire may have been too long, with too many items
Conclusions

- Reflective learning was effective in improving matched NRs’ perceptions of CSE and K&S in Year 2, but mean scores declined for POF and SS in Year 2, when NR decide to continue employment at the organization or leave the organization and/or profession.

- The strong, significant correlations between SS, CSE, and Org Com indicate the importance of reflective learning in a NRP as a means of providing structured social support for the NRs.

- The negative relationship between SS and BO indicate the strong need for program elements like reflective learning to enhance social support, diminish burnout and the potential to leave the organization.
Conclusions

• The strong relationship between Org Com and Occ Com reinforce the importance of reflective learning with discussion of professionalism in nursing (occupational commitment) and other forms of social support to prevent new graduate nurses from leaving the professional all together
  o This notion is supported by Occ Com and POF significant predictors of Org Com

• This study supports findings from other studies on the effect of nurse residency programs on retention and enculturation into the organization (Rosenfeld & Glassman, 2016)
Implications

- This study provides new knowledge about attributes of a successful NRP featuring reflective learning and the effectiveness of the program in enhancing CSE and K&S from Y1 and Y2.

- The study has global implications since the transition of NGNs into practice and the retention of nurses are important issues to nursing.

- Opportunities exist to continue NGN socialization activities beyond Y1.
References


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