The Impact of Generational Groups on Complexity Compression and the Staff Nurse Work Environment

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Presentation Objectives

Learning Objective 1
- Explain the phenomenon of complexity compression

Learning Objective 2
- Describe the impact of generational differences on complexity compression & healthy work environment standards

Background and Literature Review

How did we get here?

- Observations from our performance improvement work
- Feedback from nurses
- Literature and survey findings

Complexity Compression* defined:
What nurses experience when expected to assume additional, unplanned (unexpected responsibilities while simultaneously conducting their usual, multiple responsibilities during a work shift.

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Background and Literature Review

Review of Literature

- Nurses spend up to 40% of their workday responding to the demands (such as documentation) of the organizations where they work
- This is time not available for hands-on patient care
- Equivalent time of two out of five staff nurses not available for direct patient care
- Patients are more critical and the care being delivered is more intense
- Leads to a compression of the complexity nurses deal with in their day to day work situations

Background and Literature Review

Concepts for the Staff Nurse Work Environment Model

- Standard 1 — Skilled Communication:
  Nurses must be as proficient in communication skills as they are in clinical skills
- Standard 2 — True Collaboration:
  Nurses must be relentless in pursuing and fostering true collaboration
- Standard 3 — Effective Decision Making:
  Nurses must be valued and committed partners in making policy, directing and evaluating clinical care, and leading organizational operations
- Standard 4 — Appropriate Staffing:
  Staffing must ensure an effective match between patients’ needs and nurses’ competencies
- Standard 5 — Meaningful Recognition:
  Nurses must be recognized and must recognize others for the value each brings to the work of the organization
- Standard 6 — Authentic Leadership:
  Nurse leaders must fully embrace the imperative of a healthy work environment, authentically live it, and engage others in its achievement

The Complexity Compression & Healthy Work Environment Study Group Project
Research questions:
• What is the relationship between measures of complexity compression indicators and measures of the Healthy Work Environment Standards as reported by staff nurses?
• What mechanisms or activities do Registered Nurses use to decrease complexity compression and work environment stressors?

Purpose of this study:
• To survey staff nurses’ perceptions of the factors influencing staffing that are related to complexity compression indicators and perceptions of Healthy Work Environment Standards in their work world.

Background and Literature Review
Conceptual Framework:
Staff Nurse Work Environment Model
“Keeping your Head and Heart in the Game”

Impact on the State of the Nursing Unit Over Time

Concepts for the Staff Nurse Work Environment Model:
Factors Influencing Staffing Needs

Research Methods
Study Sample
• Convenience Sample
  - All RNs from the 3 participating hospitals (N=395)
    - Magnet (n=274)
    - On the Journey (n=87)
    - Non-Magnet (n=34)
      - Unit reported by RNs (n=303)
      - Critical care RNs (n=91)
• Sampling Procedure
  - Email solicitation of eligible RNs
  - Information distributed on each nursing unit
  - $10 Starbucks’ gift certificate raffle
• Human Subject Protection
  - IRB deemed study exempt
  - Anonymous responses
  - Online submission implied consent

Measures and Instruments
• Survey Instrument
  - Diagnostic tool used to assess
    1) Complexity compression indicators
    2) Factors influencing staffing needs (Pinkerton & Rivers, 2001)
    3) Healthy Work Environment Standards (AACN, 2005)
  - Assessment of the work environment
    - Permission was obtained to use both instruments
  - 78-item survey with 2 Likert-scales
    - 64 complexity compression items
    - 14 HWES items
    - 2 open-ended questions
  - 11 demographic questions
• Satisfactory reliability & validity
  - Cronbach’s alpha = 0.92 (CC); 0.81 (HWES)
  - Factor analysis - loaded on constructs of CC & HWES
• The SurveyMonkey© software system
Measures and Instruments

Interdepartmental Support Items

<table>
<thead>
<tr>
<th>Factor</th>
<th>Frequency experiencing factor in the last month</th>
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<tbody>
<tr>
<td></td>
<td>Minimal</td>
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<tr>
<td></td>
<td>Major</td>
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<tr>
<td></td>
<td>One of the biggest</td>
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<td></td>
<td>No more than once a 2–4 times</td>
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<tr>
<td></td>
<td>At least once a month 2–4 times</td>
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<td></td>
<td>Almost daily</td>
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Data Analysis

- Techniques
  - Frequency distributions
  - Cross-tabulation analyses using the chi-square test or Fisher’s exact test when expected cell counts were low
  - One-way analyses of variance using the F test for a difference in means together with a post hoc analysis based on the Scheffé multiple comparisons procedure
  - Logistic regression using Wald tests for testing overall and individual effects

Background

A Multi-Generational America

- Pre-Boomer (before 1946)
  - Work is an obligation
- Boomers (1946 – 53)
  - Work as an adventure; workaholics
- Jones (1954 – 1964)
  - Competitive; “keeping up with the Joneses”
- Generation X (1965 – 1979)
  - Eliminate the task; self-reliance
  - Means to an end; multi-taskers

Sample: Generational Distribution

- Using Fisher’s Exact Test: the generational differences were significant between CC and non-critical care areas (p = 0.027)

Findings

High Impact & High Frequency Complexity Compression Indicators: All Respondents (n = 395) vs. Critical Care Nurses (n = 91)

1. Effectiveness of communications
2. Bed turnover
3. Number of unit-based support
4. Teamwork/unit cohesiveness
5. Documentation expectation
6. Organizational skills of the nurse
7. Medication delivery system
8. Adequacy of support services
9. Quality of relationship with physician
10. Technology development at bedside

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9. Technology development at bedside
10. Capability of charge nurse
Generational Differences: Top Five High Impact & High Complexity Compression Indicators (N = 383)

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<tr>
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<tbody>
<tr>
<td>Effective communication</td>
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<tr>
<td>Teamwork cohesiveness</td>
<td>Documentation expectation</td>
<td># Unit based support</td>
<td>Bed turnover</td>
<td>Effective communication</td>
<td>44</td>
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<tr>
<td>Bed turnover</td>
<td>Technology development at bedside</td>
<td>Documentation expectation</td>
<td># Unit based support</td>
<td>Teamwork cohesiveness</td>
<td>44</td>
</tr>
<tr>
<td>Support services adequate</td>
<td>Teamwork cohesiveness</td>
<td>Support services adequate</td>
<td>Documentation expectation</td>
<td>Capability of charge nurse</td>
<td>22</td>
</tr>
<tr>
<td>Documentation expectation</td>
<td>Bed turnover</td>
<td>Bed turnover</td>
<td>Support services adequate</td>
<td>Bed turnover</td>
<td>77</td>
</tr>
</tbody>
</table>

Findings

Generational Differences: Impact at Unit vs. Organizational Level for HWES

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</thead>
<tbody>
<tr>
<td>Skilled communication</td>
<td>56 v 63%</td>
<td>50 v 67%</td>
<td>56 v 63%</td>
<td>41 v 60%</td>
<td>45 v 57%</td>
<td>12</td>
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<tr>
<td>True Collaboration</td>
<td>56 v 71%</td>
<td>59 v 67%</td>
<td>66 v 75%</td>
<td>73 v 69%</td>
<td>57 v 77%</td>
<td>44</td>
</tr>
<tr>
<td>EFFECTIVE DECISION MAKING</td>
<td>58 v 43%</td>
<td>55 v 70%</td>
<td>97 v 69%</td>
<td>72 v 70%</td>
<td>74 v 42%</td>
<td>22</td>
</tr>
<tr>
<td>Appropriate staffing</td>
<td>56 v 63%</td>
<td>53 v 60%</td>
<td>68 v 63%</td>
<td>47 v 60%</td>
<td>50 v 70%</td>
<td></td>
</tr>
<tr>
<td>Meaningful Recognition</td>
<td>50 v 100%</td>
<td>41 v 63%</td>
<td>95 v 66%</td>
<td>69 v 81%</td>
<td>71 v 75%</td>
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<tr>
<td>AUTHENTIC LEADERSHIP</td>
<td>50 v 43%</td>
<td>30 v 61%</td>
<td>47 v 61%</td>
<td>82 v 66%</td>
<td>97 v 81%</td>
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</tr>
<tr>
<td>Total HWES Scale</td>
<td>86 v 65%</td>
<td>59 v 62%</td>
<td>92 v 63%</td>
<td>68 v 58%</td>
<td>90 v 77%</td>
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Predictors* of Complexity Compression Indicators

<table>
<thead>
<tr>
<th>Complexity Compression Indicator</th>
<th>PREDICTOR*</th>
<th>PREDICTOR*</th>
</tr>
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<tbody>
<tr>
<td>Bed Turnover</td>
<td>5 to 10 years as RN</td>
<td>0 to 5 years as RN</td>
</tr>
<tr>
<td>Medication Delivery System</td>
<td>5 to 10 years as RN</td>
<td>11 to 20 years as RN</td>
</tr>
<tr>
<td>Technology Development at Bedside</td>
<td>CN &amp; staff nurses</td>
<td>11 to 20 years as RN</td>
</tr>
<tr>
<td>Adequacy of Support Services</td>
<td>5 to 10 years in position or 7p – 7a shift</td>
<td>0 to 5 years as RN</td>
</tr>
<tr>
<td>Effectiveness of Communication</td>
<td>Non-nursing degree</td>
<td></td>
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* p < .05 from logistic regression

Conceptual Framework:

Staff Nurse Work Environment Model

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Conclusions
Study Conclusions

- There were differences in complexity compression indicators between critical care and noncritical care nurses which may be related to generational differences and environment.
  - Gen X & Gen Y report capability of charge nurse as #1 CC indicator vs. effective communication for other generational groups.
- Overall nurses reported higher presence of HWES at the organizational level vs. unit level.
- Gen Y reported higher presence more than 80% of the time at the organizational level vs. unit level for effective decision-making & authentic leadership.
- These findings provide insight regarding the identification of generational strategies to minimize CC and promote HWES.

Bibliography


