Registered Nurses’ Personality Traits & Work Assignments

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Studies have recognized that a shortage in the levels of RNs effects:
The overall quality of patient care (increase levels of patient morality, failure to rescues, length of patient stay)
Early detection of complications, collaboration with other team members and increased levels of stress and job dissatisfaction among the working nursing personnel
Recruiting involves attracting job applicants
Selection involves choosing people to hiring among those recruited
Placement focuses on matching individuals’ abilities to a particular job

Current efforts in recruitment & selection include increased wages, subsidized training, and practice grants and scholarships

There are also federal acts and mandates focusing in recruitment and retention such as improving the image of the nursing profession and increasing the presence of minorities. Hiring foreign-born registered nurses is another immediate solution to curve the current shortage of nurses

Besides some of the research and laws concerning state level minimum staffing levels, placement has largely not been addressed in healthcare. In fact, placement has been most relevant in the military.

Over $99 million have been included in budgets for Bureau of Health Professionals grants to address the shortage

Nurse Reinvestment Act) signed into law in August 2002 by President Bush
(California Department of Health Services): Staffing ratios implemented beginning July 2003
In 2005, the AHA Commission on Workforce for Hospitals and Health Systems recognized that the key to recruitment and retention is to get the right nurse in the right place. This means focusing on clinical proficiencies as well as personal qualities and characteristics.

Person-organization (P-O) fit is generally conceptualized as the match between an individual (i.e. personal characteristics) and organizational attributes (Judge & Ferris, 1992) and has been argued as one of the keys to maintaining a flexible and committed workforce (Bowen et al, 1991; Kristof, 1996).

Personality traits (profile) can indicate: how a person typically would respond to situations created by a role how individuals can deal with certain aspects of a given occupation better than others
Introduction

- **Personality traits**
  - 30% of all American companies (Heller, 2005)
  - 40% of Fortune 100 companies (Erickson, 2004)

- **Linked to**
  - Job performance (Mount et al., 1998; Hough & Ones, 2001)
  - Job satisfaction (Connolly & Viswesvaran, 2000)
  - Job retention (Zimmerman, 2008)
  - Job-fit (Holland, 1959)
  - Nursing (Bennet & Gordon, 1944; Murrells, et al., 2008; Levin et al, 1988; Nichols et al., 1983; Ben & Holcombe, 1993; Gambles, et al, 2003)

Survey performed with human resource departments indicate that approximately......have used personality assessments in their staffing process

The Personality-Job Fit Theory assumes that examining a person's personality will give insight into their adaptability in an organization. Basically, how well they will fit in and work. By matching the right personality with the right company you can achieve a better synergy and avoid pitfalls such as high turnover and low job satisfaction (Holland, 1959).
# Introduction

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<th>Nursing Specialty</th>
<th>Personality Traits</th>
<th>Personality Inventory Instrument</th>
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<td>Critical care RN</td>
<td>Aggressive, task-oriented, efficient, decision-making</td>
<td>Cattell’s 16 Personality Factor (16PF)</td>
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<td>Oncology</td>
<td>Strong, facing stressors</td>
<td>Myers-Briggs Type Indicator (MBTI)</td>
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<td>Neurointensive</td>
<td>Emotional, feeling</td>
<td>MMPI-2, SFFF</td>
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<td>Gerontology</td>
<td>Compassionate, kindness</td>
<td>California Psychological Inventory (CPI)</td>
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<td>TV vs. Assault</td>
<td>(IUS, EIS) Low need for Dominance, Orality, Autonomy</td>
<td>Edwards Personal Preference Schedule (EPPS)</td>
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<td>High need for Recognition, Dominance, Biosensuality, Aggression</td>
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Problem Statement

• Personality traits
  – *significant & important* nursing students & professional RNs

• These studies
  – definite RN personality traits, are *both measureable* and *distinct*

• Relevancy discussed
  – these studies *failed* to show *statistical evidence* that *link* these *distinct traits to important factors* of placement such as job satisfaction, performance, retention
Research Objectives

- Personality traits of RNs in various nursing specialties
  - Job performance
  - Overall job satisfaction
  - Nurses’ intent to stay (retention)
- To develop a model to evaluate job-fit for registered nurses in various specialties
Methods

Pilot Study I

- Select a personality inventory capable of measuring normal personality traits of registered nurses
  - Analytical Hierarchy Process (AHP)

Methods/Procedures involved 3 pilot studies
The objective of the first pilot study was to select a personality inventory capable of measuring normal personality traits of registered nurses. This was accomplished by using the Analytical Hierarchy Process. Developed by Thomas L. Saaty in the 1970s, the Analytical Hierarchy Process (AHP) is a multi-criteria decision making process that allows individuals or groups to shape ideas and define problems by making their own assumptions. It imitates the way individuals would normally do about their decision making process. This process allows those making decisions the opportunity to improve their understanding of the goal by decomposing the problem, using pair-wise comparisons to determine the trade-offs among criteria, and providing consistency checks in judgments. It also allows information to be changed and tested for sensitivity of the outcomes.
There are three steps to the AHP process: first you have to determine the decision goal, criteria, and inventories. And to construct a structured hierarchy of these elements.

The second step was to make pair-wise comparisons with the level 2 & 3 elements.

The last step is to synthesis the information, using consistency ratios.

The results of this process reveals that Hogan’s Personality Inventory received the highest rating among the other personality inventories.
Once a personality inventory was selected, the next step was to identify and determine a sample population.

Pilot Study II

- Determine nursing specialties
  - Identify typical nursing specialties in the U.S.
  - Identify sample population
The "Ranking Web of World Hospitals" is an initiative of the Cybermetrics Lab, a research group belonging to the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research body in Spain.
Sample Population

- Surgical/Trauma Intensive Care (SICU)
- Neonatal Intensive Care (NICU)
- General Medical (GMU)
Pilot Study III(a)

- Explore personality trait of specialized RNs
  - Hogan’s Personality Inventory
    - Adjustment
    - Ambition
    - Sociability
    - Interpersonal Sensitivity
    - Prudence
    - Inquisitive
    - Learning Approach
    - Service Orientation (Hogan,

Adjustment: calm & self-accepting
Ambition: socially confident, leader-like, competitive, and energetic
Sociability: need/enjoy interacting with others
Prudence: conscientiousness, conforming, dependable
Inquisitive: bright, creative, interested
Learning Approach: enjoy academic activities and educational achievement
Service orientation: deals with job performance
ANOVA: Sociability trait of RNs in different units ($\alpha = 0.05$) were significantly different. RNs in GMU scored significantly higher on the Sociability trait ($m = 54$, $sd = 32$) than RNs in NICU ($m = 46$, $sd = 22$).

This suggests that nurses who care for general adult medical population tend to be more outgoing, talkative, and friendly than RNs specializing in surgical and trauma intensive care. This may be due to the culture of each environment. Registered nurses in NICU also scored higher in Sociability than nurses in SICU ($m = 26$, $sd = 20$). Contrary to previous research, there were no significant differences in the remaining personality traits of nurses in different areas of nursing specialization.
Pilot Study III(b)

- Determine, if any, associations between specialized RNs’ personality traits and job related factors
  - HPI
  - Demographics survey
    - + overall job satisfaction (Scarpello and Campbell, 1983)
    - + 2 retention questions (Price and Mueller’s Causal Model of Professional Turnover, 1981)
Nonparametric analyses were conducted to determine whether difference exists among the specialized RNs’ personality traits concerning personal job-related factors.

Results suggest that nurses specializing in surgical and trauma intensive care (SICU) tend to have been working, on average, for a shorter period of time (m = 5.58) on the unit (i.e. in their area of specialization) than NICU nurse (m = 10.25, U = 12.50, p < .05).

Results in Table 8 indicate that age (range) is associated with the Sociability personality trait. Spearman correlation analysis suggests a negative relationship may exist between the age of RNs in this study and their level of sociability. It may be inferred that as the age range of RNs increases, their level of Sociability decreases; they may become less talkative, enjoy more solitary tasks, and tend to not to need continuous social interactions to keep them interested or satisfied with their job. No other significant correlations were found.
A Mann-Whitney U test was conducted to determine if differences exist among the represented nursing specialties and their perception of overall job satisfaction ($\alpha = 0.05$). There were no significant differences found among the nursing specialty groups concerning overall job satisfaction.

Results from the correlation indicated a positive relationship between job satisfaction and Sociability ($r(20) = .490, p < .05$). Nurses overall satisfaction with their current job had a strong negative association to Prudence ($r(20) = -.551, p < .05$). It may be suggested that nurses who are more out-going, talkative, and entertaining tend to be satisfied with their job overall. It may also be inferred that nurses who exhibit carelessness to rules and policies, inattentive to details, and/or find it difficult to prioritize may have lower levels of overall job satisfaction.
Mann-Whitney U tests indicated a significant difference between SICU and NICU and their feelings on retention. Results suggest that more registered nurses specializing in neonatal intensive care felt that would more than likely not leave their current job than RNs in SICU ($\alpha = 0.05$). These results are fitting with responses to time spent on current unit, where NICU nurses had spent significantly more time on the unit than SICU nurses.

Spearman correlation coefficient was calculated to determine the association between RN's feeling about the future of their work and personality trait. Table 10 illustrates the results from the correlation analysis. It was found that RN's feelings about staying in their current work environment (i.e. specialty) had a significant positive associated with Sociability. This may suggest that nurses who intend to stay in their current position may exhibit a higher degree of enjoyment when interacting with others.
Summary

- In study I
  - Analytical Hierarchy Process (AHP) was used to choose a personality inventory to measure traits of specialized RNs; Hogan’s Personality Inventory
- In study II
  - Pareto analysis: Neonatal Intensive Care, Surgical/Trauma Intensive Care, and General (Adult) Medical
- Pilot study III a & b
  - Results of final pilot study (III) indicated an association between nursing specialty and job-related factors; specifically job satisfaction and retention
  - Results also suggest that there are significant differences in the Sociability traits among nurses in the different specialty groups
Full Study

- Full investigation warranted
  - to further investigate overall research objectives

- Methods to accomplish
  - same procedures as used in pilot studies III (a & b)
  - use results from Pareto analysis to increase sample population
  - additional facets of job performance specific to nursing specialties
Additional slides available during conference
We are modeling, modeling, modeling!!!
Thank you!

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