Factors Affecting Job Satisfaction in Nurse Faculty: A Meta-Analysis

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ABSTRACT

Evidence in the literature suggests job satisfaction can make a difference in keeping qualified workers on the job, but little research has been conducted focusing specifically on nursing faculty. Several studies have examined nurse faculty satisfaction in relationship to one or two influencing factors. These factors include professional autonomy, leader role expectations, organizational climate, perceived role conflict and role ambiguity, leadership behaviors, and organizational characteristics. This meta-analysis attempts to synthesize the various studies conducted on job satisfaction in nursing faculty and analyze which influencing factors have the greatest effect. The procedure used for this meta-analysis consisted of reviewing studies to identify factors influencing job satisfaction, research questions, sample size reported, instruments used for measurement of job satisfaction and influencing factors, and results of statistical analysis.

Nursing faculty wear many hats in the role of educator. They have an important responsibility in preparing future nurses for the profession and improving quality of patient care. At the same time, many faculty members also are responsible for providing community service, maintaining competency in practice, writing grants, conducting research, and publishing texts and journal articles. These roles are varied in scope and can cause conflict, resulting in job dissatisfaction. Administrators in nursing education must attract qualified faculty members and maximize job satisfaction to retain them.

Evidence in the literature suggests job satisfaction can make a difference in keeping qualified workers on the job (Gruneberg, 1978; McCloskey, 1974; Simpson, 1985). However, little research has been conducted related to nursing faculty. Several studies have examined job satisfaction among nursing faculty in relationship to one or two influencing factors (Christian, 1986; Donohue, 1986; Fain, 1987; Grandjean, Aiken, & Bonjean, 1976; Kennerly, 1989; Snarr & Krochak, 1996). The meta-analysis reported in this article attempts to synthesize these studies to analyze which factors have the greatest effect on faculty job satisfaction.

Purpose

This meta-analysis examined the various factors that influence job satisfaction of nursing faculty in institutions of higher education in the United States. After identifying the factors that influence job satisfaction, this article will attempt to determine which are the most significant.

Study Criteria

To obtain the literature for this study, a search was conducted in the CINHAL database for the years 1975 to the present. The key words used were job satisfaction, faculty, nursing, and research. The review was restricted to nursing faculty in baccalaureate or higher degree programs in the United States and to research articles published in nursing journals. Six research articles were retrieved and were included in the meta-analysis. The factors examined in the studies, and included in the meta-analysis were professional autonomy, leader role expectations, organizational climate, perceived role conflict and role ambiguity, leadership behaviors, and organizational characteristics.

Method

A scientific approach to research synthesis was presented by Cooper (1998) as a way to use scientific principles and rules to conduct a review of current literature, which then could make a significant contribution to knowledge in the field and be replicated by other scientists. This meta-analysis used statistical analysis of quantitative studies to calculate effect size for each study. Each study was reviewed to extract specific research questions, and an effect size was calculated by converting correlation coefficients to d statistics. Each d statistic then could be compared to determine the factors with the greatest influence on job satisfaction of nursing faculty.

The procedure used for this meta-analysis consisted of reviewing the studies to identify factors influencing job satisfaction, research questions, sample size reported, instruments used for measurement of the influencing factors and job satisfaction, and results of statistical analyses. A coding sheet was developed to tabulate the information. Results of this synthesis are included in the Table.

Results

Sample

The sample consisted of six studies published between 1976 and 1996. One study
### TABLE

Meta-Analysis Results of Factors Influencing Job Satisfaction in Nursing Faculty

<table>
<thead>
<tr>
<th>Study</th>
<th>Factors Examined</th>
<th>Sample Size</th>
<th>Instruments</th>
<th>Research Questions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandjean, Aiken, &amp; Bonjean (1976)</td>
<td>Professional autonomy</td>
<td>154 faculty members at 4 state universities</td>
<td>Structured questionnaire developed by the authors (no reliability data reported)</td>
<td>What is the importance of and satisfaction with job characteristics, particularly professional autonomy?</td>
<td>Importance rankings: 1) opportunity to be a good teacher; 2) opportunity to work with supportive colleagues and opportunity to keep clinical knowledge current; 3) a dean who lets me define my own responsibilities and fulfill them in own way; 4) a voice in policy.</td>
</tr>
<tr>
<td>Christian (1986)</td>
<td>Leader expectation</td>
<td>163 faculty members at 8 state-supported, NLN-approved nursing programs in southeastern states</td>
<td>Curriculum Participation Questionnaire-Perceptions (CPQ-P), Curriculum Participation Questionnaire-Expectations (CPQ-E) (Cronbach’s α = .94 and .91, respectively) and JDI (Cronbach’s α = .85 to .90)</td>
<td>What is the job satisfaction of faculty members in relationship to faculty’s perceptions and expectations of the department chairperson’s participative role in curriculum and instruction?</td>
<td>$r = .346$</td>
</tr>
<tr>
<td>Donohue (1986)</td>
<td>Organizational climate</td>
<td>210 faculty from 15 accredited baccalaureate nursing schools in a 3-state area on the East coast</td>
<td>Organizational Climate Description Questionnaire, modified (split-half internal consistency = .64) and JDI (split-half internal consistency = .80)</td>
<td>What is the relationship between faculty perceptions of organizational climate and expressed job satisfaction?</td>
<td>Esprit: $r = .339$ (mean $r$ for JDI subscales); Intimacy: $r = .217$ (mean $r$ for JDI subscales); Thrust: $r = .235$ (mean $r$ for JDI subscales); Consideration: $r = .233$ (mean $r$ for JDI subscales)</td>
</tr>
<tr>
<td>Fain (1987)</td>
<td>Role conflict and role ambiguity</td>
<td>285 faculty employed full time in 27 BSN programs accredited across 6 New England states</td>
<td>Role Questionnaire (RQ) (Cronbach’s α = .81 to .86) and JDI (Cronbach’s α = .77 to .89)</td>
<td>Is there a relationship between perceived levels of role conflict and role ambiguity to the 5 facets of job satisfaction when controlling for background variables of age, years of teaching, level of education, and present position?</td>
<td>Role conflict: $r = .374$</td>
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</table>

was published in 1976 (16.7%), four studies were published in the 1980s (66.7%), and one study was published in the 1990s (16.7%). All studies were published in established, refereed nursing journals.

As a result of the literature review, eight predictor variables of job satisfaction in nursing faculty were included in the meta-analysis. The predictor variables included:

- Professional autonomy.
- Leader expectations.
- Role conflict.
- Role ambiguity.
- Consideration of the leader.

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TABLE (Continued)

Meta-Analysis Results of Factors Influencing Job Satisfaction in Nursing Faculty

<table>
<thead>
<tr>
<th>Study</th>
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<th>Sample Size Description</th>
<th>Instruments</th>
<th>Research Questions</th>
<th>Results</th>
<th>d Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kennerly</td>
<td>Consideration and initiating structurebehavior of leader, and organizationalcharacteristics</td>
<td>23 deans/chairpersons and 181 full-time RN faculty from 26 privately controlclosed colleges listed in publication <em>Baccalaureate Education in Nursing 1985-1986</em></td>
<td>Index of Job Satisfaction (Cronbach’s α = .85) and subscales of Leader Behavior Description Questionnaire-Form XII (LBDQ-XII) (Cronbach’s α = .90 and .78)</td>
<td>What is the relationship between nurse faculty job satisfaction and perceived consideration behavior of the dean/chair?</td>
<td>Consideration: $r = .372$</td>
<td>.802</td>
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<td>What is the relationship between nurse faculty job satisfaction and initiating structure behavior of the dean/chair?</td>
<td>Initiating structure: $r = .325$</td>
<td>.688</td>
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<td>What is the relationship between nurse faculty job satisfaction and organizational characteristics of size, structure, pay, and tenure?</td>
<td>r = -.034 (mean r of 6 organizational climate subscales of number of nurse faculty, number of nursing majors, number of students in college, program structure, pay, and tenure)</td>
<td>.069</td>
</tr>
<tr>
<td>Snarr &amp; Krochak</td>
<td>Organizational characteristics</td>
<td>25 deans and 327 faculty in 25 baccalaureate nursing programs throughout the United States accredited by the NLN in 1993</td>
<td>Job Description Index-Revised (JDI-R) (Cronbach’s α = .88) and Organizational Characteristics Questionnaire (reliability not reported)</td>
<td>What is the relationship between job satisfaction of nursing faculty and the organizational characteristics of the institutions and nursing programs in which they teach?</td>
<td>r = .003 (mean correlation of organizational characteristics of degrees offered, programs offered, faculty, students, budget, tenure, and salary, and job satisfaction subscales)</td>
<td>.066</td>
</tr>
</tbody>
</table>

- Initiating structure behavior of the leader.
- Organizational climate.
- Organizational characteristics.

Separate effect size computations were performed for each predictor, excluding professional autonomy, because only descriptive statistics were included in that study.

**Job Satisfaction**

The Job Description Index (JDI) is an adjective checklist measuring job satisfaction on five multidimensional subscales including:
- The job itself.
- Pay.
- Promotion.
- Coworkers.
- Direct supervision.

Three of the six research studies reviewed used the JDI as the instrument to measure job satisfaction (Christian, 1986; Donohue, 1986; Fain, 1987). One study used a revised version of the JDI (JDI-R) (Snarr & Krochak, 1996). Kennerly (1989) measured job satisfaction with the Index of Job Satisfaction, an 18-item scale using a 5-point Likert-type scale, with a high score indicating a high level of satisfaction. Grandjean et al. (1976) developed their own structured questionnaire, which consisted of a list of 21 job characteristics and two open-ended questions to discuss “the best thing” and “thing liked least” about the current position.

**Professional Autonomy**

The relationship between professional autonomy and job satisfaction of nursing faculty was measured by a structured questionnaire developed by the authors. Faculty were asked to rank various characteristics of a nurse faculty position on level of importance and level of satisfaction. The authors determined faculty autonomy and participation in administrative decisions were considered important characteristics based on the findings that faculty ranked “a dean who lets me define my own responsibilities and fulfill them in my own way” and “a voice in nursing school policy” as fairly high characteristics of job importance. However, results on satisfaction rankings did not indicate faculty necessarily were satisfied with their professional autonomy, ranking both of the above characteristics as 7 and 16, respectively, out of 21 total characteristics.

**Leader Expectations**

Leader expectation was described as faculty members’ perceptions and expectations of the role of the department chairperson regarding the chairperson’s participative role in curriculum and instruction (Christian, 1986). The Curriculum Participation Questionnaire-Perceptions
Role Conflict and Role Ambiguity

One study was conducted to test the relationship between job satisfaction of nursing faculty and their perceived levels of role conflict and role ambiguity (Fain, 1987). The Role Questionnaire (RQ) was constructed to assess faculty's perceived levels of role conflict and ambiguity. Job satisfaction was measured by the JDI. Results demonstrated inverse relationships between role conflict and role ambiguity and the five facets of job satisfaction, and were consistent with expectations. In other words, as role conflict and ambiguity increased, job satisfaction decreased. The mean effect size of role conflict and role ambiguity was moderate to strong, denoting both role conflict and ambiguity as significant predictors of job satisfaction in nursing faculty.

Organizational Climate

Donohue (1986) conducted a study investigating the relationship between organizational climate and nursing faculty job satisfaction. Organizational climate was measured by the Organizational Climate Description Questionnaire (OCDQ) and consisted of the following subscales:

- Disengagement: faculty's tendency to be detached from the environment.
- Hindrance: the perception of faculty's burden by administration.
- Esprit: faculty's morale.
- Intimacy: positive socioemotional relations among faculty.

Leader behavior was also measured on four subscales:

- Alokiness: the informal behavior of the leader.
- Production emphasis: the supervision of faculty.
- Thrust: active, task-oriented leadership.
- Consideration: treatment of the faculty by the leader.

Job satisfaction was measured by the JDI. Findings indicated the subscales of disengagement, hindrance, alokiness, and production emphasis were negatively or minimally correlated with JDI scores. Esprit had the largest effect size when examined with job satisfaction. Intimacy had a moderate effect size. Leadership factors of thrust and consideration had moderate to strong effect sizes.

Leadership Behavior and Organizational Characteristics

The relationship among nurse faculty's job satisfaction, the leadership behaviors of consideration and initiating structure, and organizational characteristics was examined by Kennerly (1989). The subscales of the Leader Behavior Description Questionnaire-Form XII (LBDQ-XII), which measures consideration and initiating structure, were used for this study. Consideration was defined as behavior that indicated mutual trust, respect, warmth, and rapport between a supervisor and his or her group. Initiating structure was defined as behavior in which the supervisor organizes and defines group activities and relationships to the group. Job satisfaction was measured using the Index of Job Satisfaction. Consideration and initiating structure of the dean or chairperson were correlated with job satisfaction and had large effect sizes. Organizational characteristics measuring number of nurse faculty, number of nursing majors, number of students enrolled, program structure, pay, and tenure had a low overall effect size.

A study conducted by Snarr and Krochak (1996) also examined organizational characteristics in relationship to nurse faculty job satisfaction. Organizational characteristics were measured using the Organizational Characteristics Questionnaire, and job satisfaction was measured using the JDI-R. The specific characteristics examined were control (i.e., public or private), degrees offered, types of programs offered, number of full-time nursing faculty, number of nursing students enrolled, budget, tenure status, and salary. The effect size of organizational characteristics was low and similar to Kennerly's (1989) findings.

Discussion

To date, little has been published in nursing journals on the factors that affect nursing faculty job satisfaction in the United States, and few studies have examined more than one factor. Based on the synthesis of the six research articles included in this meta-analysis, several factors appear to predict a relationship with job satisfaction, whereas other factors seem to have little to no affect. Factors that appear to have the highest predictive power are intrinsic, rather than extrinsic, which is consistent with a previous study exploring the importance of intrinsic and extrinsic conditions (Marriner & Craigie, 1977).

Organizational characteristics seem to have little predictive power in determining nursing faculty job satisfaction, with low effect sizes of .069 and .066. Organizational climate also has low predictive power, with several indicators having minimal to no correlation to job satisfaction. The organizational climate subscales of esprit and intimacy had a moderate combined mean effect size of .590. The subscales of thrust and consideration, which actually measured leadership traits, also had a moderate combined mean effect size of .574. The low to moderate effect sizes for organizational characteristics and climate suggest salary, program size, tenure, supervision, and control have little to no predictive power related to job satisfaction and do not rank as important characteristics for career gratification for nursing faculty.

A factor that appears to significantly affect nursing faculty job satisfaction is the perception/expectation of the leader's role in curriculum and instruction, with an effect size of .738. Other leadership factors that have high effect size are consideration and initiating structure behaviors with .802 and .688, respectively. This seems to indicate that dean or chairperson behavior strongly influences nursing faculty job satisfaction.

Role conflict and role ambiguity also have significant effect sizes at .806 and .588, respectively. Because of the nature of the nurse educator's role, these effect sizes

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are not surprising. Nurse educators continually are involved in potential sources of conflict and struggle with the various roles of educator, grant writer, researcher, clinician, role model, and scholar, making achievement and ability more difficult to define.

Professional autonomy would appear to be a significant factor in influencing nursing faculty job satisfaction, but it is difficult to extrapolate the importance from this one study. Completing a factor analysis to determine the characteristics that actually represent professional autonomy would be helpful. Multiple correlation analysis to determine which characteristics truly have a relationship to job satisfaction also would benefit this study.

**Conclusion**

Relationships were found with the predictors studied and job satisfaction but were not exhaustive. Additional research related to nursing faculty job satisfaction needs to be conducted addressing the variables of leadership traits, role conflict and ambiguity, and professional autonomy, as well as other psychological, sociological, and personality variables that may affect job satisfaction and work gratification.

Recent data suggest a number of factors influencing nursing faculty have decreased the number of qualified educators (Hinshaw, 2001). These factors include an overall decrease in the enrollment of students in nursing programs, a decrease in the number of graduate nurses selecting academia, and an overall "aging" of the nurse educator population (Hinshaw, 2001). The job satisfaction of current and future nursing faculty must be of paramount importance to administrators in halting the decline in number of faculty.

The nursing profession needs motivated and qualified educators. Satisfaction with educating future nurses is an important factor in retaining nursing faculty. Because job satisfaction has not been well studied, it is recommended this topic be explored more thoroughly in future research studies.

**References**


