

THE DOUBLE STUDY METHOD IN NURSING RESEARCH

LOUISE DAVIS

Assistant Professor, Faculty of Nursing
University of Alberta Hospitals

INTRODUCTION

In a study on job satisfaction among Alberta nurse educators conducted in June, 1980, two separate aspects of the work situation were investigated: the "Importance" of various job characteristics to overall job satisfaction, and present "Level of Satisfaction" with these same characteristics in the context of the job the respondent is holding. Similar studies among nurse educators in the United States by Marriner and Craigie (1977), and Grandjean et al. (1976) used a single three part questionnaire for each respondent. In each study, the results indicated that the nurse educators investigated tended to be dissatisfied with what they felt was important and satisfied with what they did not feel was important. In commenting on their findings, Marriner and Craigie (1977: 359) reflected that "it may be that people regard as important only those aspects of their job which are so annoyingly unsatisfactory that they cannot be ignored." They also speculated that in applying Maslow's theory to studies of job satisfaction, it would seem logical that unmet needs would be judged to have more importance than needs that are met because they would precede others in human consciousness. Neither research group made reference to their method in interpreting their results.

METHODOLOGY

Cronback (1958: 354) refers to this type of study as "dyadic" or one in which "the score representing the distance or similarity between two perceptions of the same persons..." is compared. In this instance, the "Importance" and "Level of Satisfaction" of individual respondents is measured on the same instrument. Cronback (1958: 358-359) asserts that a difficulty arises in interpretation of these studies, unless the simple, main effects associated with the perceiver or the object of perception have been given separate consideration:

Scores ... derived from the same instrument are not mathematically independent where errors of measurement affecting one element influence the others also, significance tests are spurious and correlations are artifactually raised or lowered ... The goal in experimental design is to make the various observations experimentally independent.

For this reason, I developed two separate three-part forms for my study on job satisfaction: Form A and Form B. Each had the following sections:

Section A asked for personal and professional data.

Section B provided a list of 57 job characteristics.

In Form A, respondents were asked to assess and rate each item for its "Importance" to job satisfaction on a Likert-type scale. In Form B, respondents were asked to rate their current level of satisfaction with each of the same items in the context of the job currently held.

Section C asked all respondents to summarize how they felt about their current jobs by rating their overall level of job satisfaction. As this question was asked on both forms, it is not part of the double study methodology.

In May, 1980, 258 questionnaires were sent to individual nurse educators in all eleven Alberta Schools of Nursing. An almost equal number of Form A (130) and Form B (128) questionnaires were distributed using a table of random numbers. This ensured that every nurse educator received either Form A or Form B questionnaires. There were 89 Form A or "Importance" questionnaires, and 91 Form B or "Level of Satisfaction" questionnaires completed and returned.

Respondents in the Form A group were statistically compared with respondents in the Form B group, to determine whether significant differences existed between them on the basis of the variables being treated. An examination of the chi square analyses for each pair of demographic variables revealed that no significant differences existed at the 0.05 level of probability.

The conclusion was that samples were drawn randomly from the same population, and findings from each sample could be generalized to the Alberta nurse educator population.

FINDINGS AND DISCUSSION

Importance and Level of Satisfaction

Table I contains items which received highest and lowest scores on both the Form A "Importance" measurement and the Form B "Level of Satisfaction" instrument. Ten items were selected from each group: five with the highest and five with the lowest rankings.

Table I
Form A "Importance" and Form B "Satisfaction" Scores
for 17 Selected Questionnaire Items

<i>Scale 1:</i>		<i>Scale 2:</i>	
No Importance	= 1	Very Dissatisfied	= 1
Little Importance	= 2	Somewhat Dissatisfied	= 2
Some Importance	= 3	Neutral	= 3
High Importance	= 4	Somewhat Satisfied	= 4
Very High Importance	= 5	Very Satisfied	= 5

Item	Form A Importance		Form B Satisfaction	
	Mean ¹	Rank	Mean ²	Rank
The feeling that my work is important	4.55	1	4.30	12
Opportunities for professional and personal growth	4.54	2	3.77	36.5*
Opportunity to plan and organize my own work responsibilities	4.49	3	4.47	4.5*
Freedom to choose my own instructional methods	4.46	4	4.55	2
Extent to which I am kept informed about decisions and events that affect my work	4.42	5	3.45	48
Relationships with students	4.38	8	4.73	1
Relationships with colleagues	4.28	15	4.52	3
Respect of students	4.40	7	4.47	4.5*
Social opportunities and contacts at work	2.80	57	3.83	30
Opportunities to engage in research	2.88	56	2.59	57
Institutional location of school	3.25	55	4.29	13.5*
Type of program	3.27	54	4.39	8
The community in which my work is located	3.30	53	4.02	24
Supervision and evaluation of faculty members	3.64	44	3.04	56
Course preparation time	3.97	32	3.06	55
Opportunities for promotion	3.34	52	3.07	54
Ability of dean (director, chairman) to provide educational leadership	4.02	28	3.20	53

* Indicates tied ranks.

In examining the table, it is clear that three out of five of the items rated most important to job satisfaction received rankings which indicated that nurse educators were, for the most part, satisfied with these characteristics of their jobs. Of particular note is that "Opportunities to plan and organize my own work responsibilities" and "Freedom to choose my own instructional methods," items suggestive of work autonomy, ranked very high on both scales. This was an area which, despite its ranked importance, was found less satisfying by both Grandjean et al. (1976), and Marriner and Craigie (1977) in the faculties of nursing which they studied.

Alberta nurse educators were much less satisfied with "Opportunities for professional and personal growth" and "Extent to which I am kept informed about decisions and events which affect my work," two items which ranked second and fifth in importance.

Although most nurse educators expressed the least satisfaction with opportunities to engage in research, they also ranked this item fifty-sixth in importance to satisfaction in their present jobs. This reflects the paucity of nursing research now taking place in Alberta schools of nursing along with an adherence to the conventional professional wisdom that research is a desirable activity in and of itself. Similar findings were reported by Seyfried et al. (1976) and Grandjean et al. (1976) in their research with university educators in the United States.

Relationships with students and colleagues and the respect of students were generally considered important and satisfying. As relationships with students are at the core of the teacher's role, it is difficult to imagine a nurse educator who would be satisfied in her work without finding her contacts with students rewarding.

The value assigned to the "Ability of the dean (director, chairman) to provide educational leadership" was high in most cases, but the current level of satisfaction with this item was generally low, ranking fifty-third on the scale.

The Spearman rank-order coefficient was calculated to determine the strength of relationship between the rankings of the means on the "Importance" and "Level of Satisfaction" scales. The correlation coefficient of 0.31 indicated that there was not a strong relationship between them. One could not safely predict the level of satisfaction with a characteristic of the job from the importance that was assigned to job satisfaction.

However, for the most part, Alberta nurse educators were satisfied with those items they ranked high in importance to job satisfaction. Those items with which they were only "Neutral" or "Somewhat Satisfied" reflect deficiencies in communication, staff development and evaluation, and educational leadership in their institutions.

Overall Job Satisfaction

Respondents in both groups summarized their level of overall job satisfaction by selecting a number on a scale which most accurately represented their feelings in the job currently held. The scores ranged from 1 representing "Very Dissatisfied" to 5 for "Very Satisfied". A neutral category was not offered so that respondents would be forced to record an attitude.

The mean score for Form A respondents was 3.19, and Form B respondents, 3.07. The overall mean of 3.13 meant that generally, nurse educators were little more than "Somewhat Satisfied" with their current jobs.

CONCLUSION

It appears that job satisfaction is a very complex phenomenon. This study focused on specific characteristics of the job and examined separate aspects of the work situation using two separate questionnaire forms. Although results showed that many items rated high in importance were also found satisfying in the work situation, there was very little statistical relationship between the two measures. It is possible that the same results would have occurred in a study using a single instrument. However, the author believes that use of the double study method gives more credibility to the findings. A more complete examination of job satisfaction would necessitate exploration of the characteristics of individuals and the network of supportive relationships both on and off the job.

REFERENCES

- Cronbach, Lee J.
1958 "Proposals Leading to Analytic Treatment of Social Perception Scores." In *Person Perception and Interpersonal Behavior*. Renato Taquiere and Luigi Petrullo (eds.). Stanford: Stanford University Press.
- Grandjean, Burke D., Linda H. Aiken and Charles M. Bonjean
1976 "Professional Autonomy and the Work Satisfaction of Nursing Research, 25 (3): 216-221.
- Marriner, Ann and David Craigie
1977 "Job Satisfaction and Mobility of Nursing Educators in Baccalaureate and Higher Degree Programs in the West." *Nursing Research*, 26 (5): 349-360.
- Seyfried, Shirely H. Halpin, Carolyn Crowell, Eva H. Erickson, and Patricia Ostmo.
1977 "Factors Influencing Faculty Choice of Position." *Nursing Outlook*, 25 (11): 692-696.

RÉSUMÉ

La recherche en nursing: méthode à deux études

Le présent article fait état d'une méthode de recherche à deux études utilisée pour approfondir deux aspects différents de la situation professionnelle des professeurs de sciences infirmières en Alberta: l'importance de différentes caractéristiques des fonctions dans la satisfaction d'ensemble et le "niveau de satisfaction" actuel en se basant sur les mêmes caractéristiques. Compte tenu des difficultés d'interprétation qui surgissent lorsque l'on ne se sert que d'un instrument, le chercheur a utilisé deux questionnaires: un pour étudier l'importance et l'autre pour évaluer le niveau de satisfaction. Les questionnaires ont été distribués au hasard, un nombre égal de répondants recevant chacun des questionnaires. Les résultats ont indiqué que de nombreux éléments jugés "importants" étaient également liés à la satisfaction professionnelle; on n'a toutefois pas noté de rapport statistique entre les deux mesures. Il est possible que les mêmes résultats aient été obtenus à l'aide d'un seul instrument de mesure, mais la méthode à deux études donne plus de poids aux résultats.

NURSING FACULTY UNIVERSITY OF MANITOBA

Applications are invited for faculty positions, at the rank of Lecturer, Assistant Professor or Associate Professor, to teach in both the baccalaureate program and the master's program. Candidates must have a Doctorate or Masters degree in Nursing. Preference will be given to candidates with demonstrated competence in both teaching and research. These are term positions and subject to funding. Salary and rank commensurate with qualifications and professional achievement. Both men and women are encouraged to apply. In accordance with Canadian Employment and Immigration policy, consideration in the first instance will be given only to Canadian citizens and permanent residents. Positions are available for September, 1982. The deadline for applications is June 1, 1982. Applicants should forward their curriculum vitae and the names of three references to:

Miss June Bradley
Director
School of Nursing
University of Manitoba
Winnipeg, Manitoba
R3T 2N2