THE EFFECT OF ORGANIZATIONAL AND GROUP CHARACTERISTICS OF FACULTY'S PERCEPTION OF CLIMATE IN SCHOOLS OF NURSING*

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CONTEXT OF THE STUDY

Introduction

Every organization has an aspect known as internal environment, milieu, institutional atmosphere, or psychological or organizational climate. Organizational climate has been defined in very broad terms, such as the personality of the organization (Forehand and Gilmer, 1964), the feel of the employees (Dressler, 1977, p. 286), "an umbrella concept" (Hall, 1975, p. 226) or "an employee's subjective impression or perception of his organization" (Lawler, Douglas, Hall and Oldham, 1974).

Research Problem

Although organizational climate studies have been common in industry and elementary and secondary schools, relatively few climate studies in Canadian post-secondary institutions were found (Russell, 1974, p. 79). No studies were found which investigated organizational climate in schools of nursing.

Studies conducted in industrial settings have indicated that individuals at different levels in the hierarchy, in different formal or informal groups, with varying degrees of involvement and commitment would not have identical perceptions of leadership behaviour, organizational constraints, and so on. The research question in the present research asked: How do group and organizational characteristics affect a member's perception of climate in Canadian University Schools of Nursing? Eight subproblems were formulated to address the problem. The subproblems related to the impact of the independent variables (namely hierarchy, rank, tenure, experience on present faculty, experience in nursing education, age, type of contract and type of assignment) on the dependent variable (namely perception of climate dimensions).

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Literature Review

During the early 1960's researchers were active in the development of climate instruments and in studies diagnosing organizational climate in industrial organizations and public schools (Halpin and Croft, 1963; Null, 1967; Pace, 1968; Sargent, 1967; Wilson, 1966). Climate research was considered significant for three reasons:

- 1. As an initial step in problem solving through assessment.
- 2. As a means of preventing problems through periodic monitoring of the situation.
- 3. As an incentive in the process of self renewal within an organization (Fox, Schmuck, Van Egmond, Ritvo and Jung, 1973, pp. 129-134).

The concept of an overall label of climate as in "open climate" or a "closed climate" was subjected to considerable criticism (Andrews, 1965). By the late 1960's the emphasis for researchers was on developing climate dimensions and on investigating relationship of climate to other aspects of organizations.

Campbell, Dunnette, Lawler and Weick (1970, p. 393), after analysing climate conceptualization and instrument development by and Litwin and Stringer (1968), Schneider and Bartlett (1970), Kahn, Wolfe, Quinn, Snock and Rosenthal (1964), and Tagiuri (1968), found that each included some aspect of the following five core dimensions:

- 1. Individual autonomy, referred to individual responsibility, independence, rules orientation and initiative.
- 2. The degree of structure imposed upon the position, included leader behaviour such as initiating structure, supervision, and direction.
- 3. Reward orientation, included promotion and recognition practices, as well as an achievement emphasis.
- 4. Consideration, warmth, support, referred to aspects of consideration and trust on the part of the leader.
- 5. The group, referred to cooperativeness, tolerance of conflict, interpersonal peer relationships, and an honest, open relationship among peers.

Theories such as those developed by McGregor (1960), Argyris (1964), and Likert (1967) have been the basis of research examining the relationship of organizational climate to other aspects of organizations. Gorman and Molloy (1972, p. 1) stated: "The assumptions we make about people guide and direct the way we behave

towards them . . . and generally continue to shape organizational structures and practices."

Definitions of organizational climate may be derived from the views that theorists hold of the relationship of climate to other aspects of the organization. Organizational climate may be conceived of as (1) an independent variable, (2) an intervening or moderating variable, or (3) a dependent variable. Hellriegel and Slocum (1974) used such a classification to survey and categorize studies of organizational climate. Most frequently, organizational climate has been thought of as an independent variable influencing the satisfaction and productivity of the organization's members (Dessler, 1976, p. 187; Cawsey, 1973, Hand, Richards and Slocum 1973).

Organizational climate may also be studied as the variable dependent on organizational dimensions such as leadership behaviour, organizational structure, and technology (Litwin and Stringer, 1968; Stimson and LaBell, 1971; George and Bishop, 1971).

Organizational climate is not always conceived of as either a dependent or an independent variable, but may rather be conceived of as an intervening or moderating variable. In this respect organizational climate has been referred to as a "go between" or "link" (Dessler, 1976, p. 190), a "bridge" (Dessler, 1977, p. 287); or a "filter" between organizational characteristics such as structure, technology, leadership style, and aspects of members' feelings and behaviour such as motivation, satisfaction, performance (Litwin and Stringer, 1968, p. 43). Hellriegel and Slocum (1974) reported studies such as those by Marrow, Bowers and Seashore (1967) and Hand et al. (1973), in which climate was conceived of as an intervening variable.

Researchers began further investigation of differences in perceptions of climate of members of a single organization. Based on the findings of studies by Herman, Durham and Hulin (1975), Forehand and Gilmer (1964), and Porter and Lawler (1965) indicating that a member's current position in an organization is more significant in determining perception of climate than are demographic characteristics, the focus of the present research was on the impact of group and organizational characteristics of climate. Hellriegel and Slocum (1974, p. 256) suggested that there continues to be a need to identify differences of climate perception based upon "objective individual measures."

Conceptual Framework

The model proposed by Dessler (1976, p. 176) formed the basis for identifying the relationship of organizational climate to other aspects of an organization (see Figure 1). Conceptually climate was viewed as the intervening variable between objective organizational structure and processes (independent variables), and attitudes and behaviours of organizational members (dependent variables).

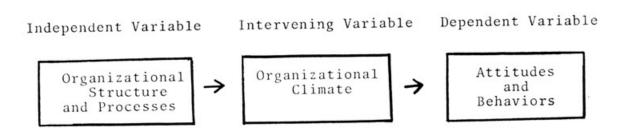


FIGURE I

The Relationship of Climate to Other Aspects
of an Organization

Although this model was useful for the purpose of conceptualizing organizational climate as it related to other aspects of organizational structure and process, this study focused only on the effects of selected aspects of organizations on organizational climate. Thus climate was studied as a variable dependent on the independent variables of structure and process.

Hellriegel and Slocum's (1974, p. 256) definition of organizational climate was found useful in conceptualizing organizational climate as:

... a set of attributes which can be perceived about a particular organization and/or its subsystems, that may be induced from the way that organization and/or its subsystems deal with their members.

Significance of the Study

This study added to the theory of organizational climate through an understanding of the effect of selected organizational and group characteristics on perception of climate in nursing faculties. Since the data were analysed on the basis of group responses to the climate questionnaire, the data offered information about subsystems within a university nursing department.

The study also contributed to knowledge about university schools of nursing in Canada. No studies were found which investigated organizational climates in schools of nursing.

Delimitations of the Study

- 1. The study was delimited to one type of organization, namely, university schools of nursing.
 - 2. The study was delimited to selected nursing faculties.
 - (a) in which the basic language used was English,
 - (b) that offered both a basic baccalaureate program in nursing and also a master's program in nursing.

The above criteria delimited the study to seven university schools of nursing. Six of the schools agreed to participate in the study.

- 3. The study was delimited to perceptions of faculty members only.
- 4. The independent variables were delimited primarily to factors related to faculty members' position in the organization hierarchy, rank, tenure, experience, age, contract and assignment. The dependent variables were the dimensions of climate.
- 5. Since individuals and institutions were assured anonymity, no attempt was made to compare identified groups in the institutions. For example, mean responses of administrators were not compared across institutions.

RESEARCH DESIGN

Instrument Selection

Several climate instruments were examined (e.g. Halpin and Croft, 1963; Borrevik, 1972; Pace, 1968; Litwin and Stringer, 1968).

Litwin and Stringer's (1968) Climate Questionnaire (Form B) appeared to be a useful instrument and was selected for use in this study since it included the five core dimensions identified by Campbell et al. (1970). In addition, organizational structure, a dimension included in many instruments, was included in the Litwin and Stringer instrument.

In the original development of the tool, Litwin and Stringer sent open ended questions to various members of the General Electric Company. The responses were analysed and forty-four items in eight categories were isolated by judges experienced in content analysis. Due to lack of agreement one category was dropped and two were combined. Thirty-one items in six categories formed the basis of the initial Climate Questionnaire (Form A).

In order to evaluate the consistency of the scales, the questionnaire was administered to various business and university personnel. Following further modifications to the instrument items and scales, Litwin and Stringer (1968, pp. 81-82) identified nine scales for the Climate Questionnaire (Form B):

- 1. Structure measured role clarity, decision making structure, emphasis on formalization, channels of communication, and degree of standardization.
- 2. Responsibility emphasized autonomy, use of judgment, type of supervision, innovativeness, and responsible behavior.
- Reward examined the basis for promotion, recognition, encouragement and criticism.
- 4. Risk measured the encouragement and discouragement given to risk taking and innovativeness.
- 5. Warmth measured the degree of friendliness, warmth or aloofness among peers.
- 6. Support measured the degree of assistance, sympathy, and general people orientation of the administration.
- 7. Standards examined priorities in the organization, the degree of initiating structure and thrust exhibited by the leader, and feelings of pressure or challenge experienced by the group members.
- 8. Conflict focused on the attitude toward and tolerance of conflict. It questioned if smooth, quick decision making is valid, if competitiveness is considered healthy, and if members may freely disagree with superiors.
- 9. Identity measured the member's feelings of belonging, pride and team membership.

Validity and Reliability of the Instrument

Over a period of time Form B of the Climate Questionnaire was administered to groups of organizational members of varying levels within the organization. Litwin and Stringer (1968, pp. 82-83) stated:

Scale consistency, referring to the extend that items in the scale are positively related and measuring the same thing, is considerably better than in the initial measure... The items in the Standards scale were new, and two of these items correlated fairly substantially with items in the Responsibility scale. It was felt that some rewording would solve their problem. The Conflict scale... appeared to have some basic weaknesses... it is most likely to measure the presence of conflict.

These identified weaknesses did not lead to further revisions by Litwin and Stringer.

Modification of Instrument Items

Since the Climate Questionnaire (Form B) was developed for use in industrial organizations, it was necessary to modify items so that their meaning would be relevant and their wording meaningful to nurse educators.

Pilot Study

Having modified items in the Climate Description Questionnaire, one of the larger Canadian university schools of nursing, not selected for the research, was asked to assist with a pilot study. Faculty members were asked to rate each item on a scale of eight from unclear to clear. They were further encouraged to identify which aspects of items were unclear and/or might be clarified. An effort was made to clarify items without changing the meaning of the item. For example, a question which read: "We have to take some pretty big risks occasionally to keep ahead of the competition in the business we're in," was changed to read: "In our faculty we have done well because we were innovative (creative, took calculated risks)."

Additions to the Instrument

A section on personal data was developed to allow for description of respondents, and to facilitate the analysis of group differences.

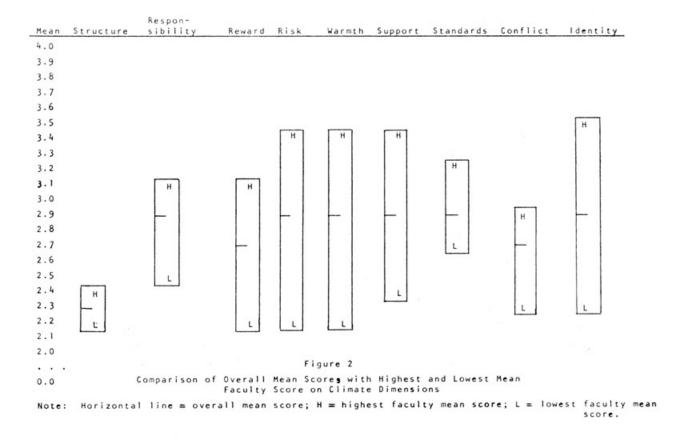
Data Collection

Questionnaires were sent to all 269 faculty members of the selected university schools of nursing. Each questionnaire was accompanied by a cover letter assuring respondents of anonymity and offering directions.

Faculty members were asked to respond to each item on a Likert type scale from 1 to 4: definitely disagree, inclined to disagree, inclined to agree, definitely agree. There were 191 (71 percent) useable returns.

Data Analysis

Frequency distributions. Based on the frequency distributions of items, means of responses were identified to provide a profile of overall perceptions of members of nursing faculties in the six selected schools (see Figure 2).



Frequency distributions of the personal data in the questionnaire facilitated the description of respondents. It was possible, for example, to determine the percentage of respondents who were administrative as opposed to teaching faculty (see Table 1).

Groupings from the section on personal data were used as the independent variables to achieve the major purpose of the study: to investigate the impact of organizational and group characteristics on the perception of organizational climate.

Scoring of items and analysis of data. The scoring technique developed by Dr. Litwin was used for reflection of some items (reversing of scores) so that all high responses were positive on a particular scale. To determine differences in the mean responses of various groups on the nine scales of the climate questionnaire, t tests and F tests were employed. The raw scores obtained appeared to reasonably satisfy the assumptions of the analysis of variance.

FINDINGS AND DISCUSSION

Description of Respondents

Using the data from Part II (Personal Data) of the questionnaire, respondents were categorized on the basis of the independent variables. The results are indicated in Table 1.

Findings and Discussion related to Subproblems

Subproblem 1 — Hierarchy. How did administrative faculty members differ from teaching faculty members in their perception of the organizational climate?

There were statistically significant differences between the mean responses of administrators and teachers on five of the nine climate dimensions. From this finding it might readily be concluded that administrators and teaching faculty differed in their perceptions of climate. This conclusion supports the finding of studies by Payne (1973), Schneider (1973), and Gorman and Molloy (1972) who found that position in the organization does affect perception of climate.

In the present study administrators' mean scores were higher than teachers mean scores on the dimensions of reward, and support (p < .01) and on the warmth, conflict and identity dimensions (p < .05).

Most promotions, changes in status, or increases in salary result from recommendations of a faculty's administration. Consequently, perception of reward reflects on the administration. It was not surprising that the administration of a faculty would have a more positive perception of the reward system than would the teaching members of faculty. Similarly, items on the support dimension focused largely on the support of the administration for members of faculty and the conflict scale also reflected largely the attitudes of the administration, since it is generally administrators who either tolerate or do not tolerate conflict. The other two dimensions showing significant levels of differences in response were warmth and identity. These scales reflected the friendliness and comradeship among members of the faculty. Perhaps administrators expected faculty members to support the administration and, therefore, perceived the members as identifying with the organization, working as a team and showing warmth and friendliness toward each other.

Although there were no statistically significant differences on the other scales, the mean responses indicated that the administrators,

TABLE 1
CLASSIFICATION AND DISTRIBUTION
OF RESPONDENTS

Categories	Categories		Percentages
Hierarchical Level	Administrative Teaching	23 167	12.1 87.9
		N=190	
Rank	Professor	12	6.3
	Assoc. Prof	46	24.2
	Assist. Prof. Lecturer	68	35.8
	Instructor	52	27.4
		N=178	
Tenure	Tenure	61	32.3
	Non tenure	128	67.7
		N=191	
Years on	1	38	18.5
Faculty	2 - 4	74	39.2
	5 - 10	55	29.1
	Over 10	25	13.2
		N=189	
Years in	1	20	10.5
Nursing	2 - 4	34	17.9
Education	5 - 10	66	34.7
	Over 10	70	36.8
		N=190	
Age	21 - 25	28	14.7
	30 - 39	70	36 .8
	40 - 49	60	31.6
	Over 50	32	16.8
		N=190	
Contract	Full time	169	88
	Part time	23	12
		N=192	
Assignment	Classroom	37	21.1
	Clinical	59	33.7
	Both	73	41.7
		N=169	

when compared with the teaching faculty, identified the organization as less structured, encouraging more individual responsibility, allowing for more creativity, and less demanding of high performance standards. In short, the administrators perceived the organization as highly considerate of its members.

It might be concluded that administrators and teaching faculty in schools of nursing differed in their perceptions of organizational climate. Specifically, administrators perceived the organization more favorably than did the teaching faculty.

Subproblem 2 — Rank. How did faculty members of different rank vary in their perceptions of the organizational climate?

There were statistically significant differences in the mean responses of faculty members at different ranks on six of the nine climate dimensions.

The findings of this study supported the results of studies identified for comparison. Porter and Lawler (1965), Payne and Mansfield (1973), Schneider (1973), Gorman and Molloy (1972) and Herman et al. (1975) all found that position in an organization affected perception of climate.

The four groupings employed in the data analysis were professor, associate professor, assistant professor, and lecturer/instructor.

Analysis of variance revealed significant differences between the groups beyond the 0.05 level on the climate dimensions of structure, responsibility, support, conflict and identity. Significant differences differences beyond the 0.001 level were noted on the reward dimension.

The nature of the differences was investigated further by application of the Scheffé multiple comparison of means test. Faculty at the associate and full professor ranks not only perceived greater rewards from the administration than did the assistant professor and the lecturers/instructors, but they also perceived the administration as being more supportive, of tolerating more conflict, and of allowing them a greater degree of autonomy. These findings were not surprising since the perceptions were probably accurate reflections of reality. What was more difficult to understand was the finding that associate professors perceived the organization as significantly more structured than did the assistant professors. A comment by Payne and Mansfield (1973, p. 523) perhaps provided a partial explanation:

. . . specialization, and the increasing professionalization associated with specialization, does lead to more stimulating

climates in the area of work itself, that is, scientific and technical orientation, intellectual orientation, job challenge, task orientation, and industriousness. Greater specialization also helps to explain the higher degree of questioning of authority in larger organizations.

The associate professors may be the more specialized faculty members by virtue of education and experience and may as a result have perceived more structural constraints. The findings indicated that members at the rank of associate professor or full professor identified more fully with the organization and were more committed to it than were assistant professors and lecturers/instructors. They may also have been the individuals who had been with the organization for the longest period of time and had developed influential positions on the faculty.

It was further puzzling to note that, except on the risk dimension, the lecturers/instructors had higher mean scores than did assistant professors. Assistant professors had the lowest mean responses on all but the risk climate dimension. The lecturers/instructors may have been the youngest, least educated, and least experienced members of faculty. They may have perceived the climate of the organization more positively because of their own perceived fortune in being given a position on the faculty. The assistant professors, on the other hand, may have been disillusioned with their lack of power and with the length of time it takes to be promoted from one rank to another. In many nursing faculties there continues to be a high rate of faculty turnover. It would be interesting to determine if it is most frequently the assistant professors who move from one faculty to another.

It was concluded that those at the rank of assistant professor had a less favorable perception of the organization's climate than did those at the lecturer/instructor, associate professor, and those at the full professor levels.

Subproblem 3 — Tenure. How did tenured faculty members differ from non tenured faculty members in their perception of the organizational climate?

Tenure, like rank, could be seen as one of the objective indices related to the employee's position in the organization. Tenure, however, had far less impact on the perception of climate than did hierarchy or rank. The only dimension on which the mean responses of tenured and non tenured faculty differed significantly was the reward scale. Tenured faculty had significantly higher mean scores

on the reward dimension than non tenured faculty (p < 0.001). The difference on the reward dimension may be explained on the basis of the security and sense of commitment of tenured faculty. Tenured members do indeed have greater rewards since they have been rewarded with the status of tenure. It was concluded that the status and security associated with tenure did not significantly influence the perceptions faculty members have of the organizational climate, except in the area of rewards where tenured members perceived greater and more equitable rewards.

Subproblem 4 — Experience on Faculty. How did faculty members who have been on faculty for differing periods of time vary in their perceptions of the organizational climate?

The responses were grouped into four categories: those who were in their first year on the present faculty, those who were in their second to fourth years, those in their fifth to tenth years, and those who had been with the present faculty for more than ten years. Analysis of variance revealed significant difference between groups beyond the 0.05 level on the dimensions of responsibility, risk, and identity; beyond the 0.01 level on the standards dimension; and beyond the 0.001 level on the reward dimension. The findings of the present study supported Johnston's (1976) conclusion that members who had been with the organization for varying lengths of time differed in their perceptions of climate.

The Scheffé multiple comparison of means test identified the pattern of responses was quite consistent on all scales with those in their second to fourth years having the lowest mean responses, followed by those in their fifth to tenth years. The mean responses of members in their first year and those with more than ten years on the faculty were quite similar and were higher than the mean responses of either of the other groups.

The high scores of members in their first year with the organization were not easily explained. Perhaps in their first year they were taking cues primarily from the administration. It is understandable that those who had devoted more than ten years to a specific organization would identify with the organization, and feel committed to the climate which they assisted in creating. Faculty in their first year may have felt fortunate to be members and may at the same time have been aware of the responsibilities they were given.

It might be concluded that faculty in their second to fourth years on faculty were somewhat disillusioned, or less favorably impressed by the climate of their organization, particularly in the areas of reward, autonomy, creativity, standards and identity. They may indeed be seen as, and treated as, newcomers by the administration and by faculty with more extensive experience in the organization.

Generally, the findings of this study indicated that the longer individuals had been in contact with an organization the more positive were their perceptions of the organization's climate.

Subproblem 5 — Experience in Nursing Education. How did faculty members with differing lengths of experience in nursing education vary in their perceptions of the organizational climate?

Analysis of variance indicated significant differences between groups beyond the 0.05 level, in mean responses on five dimensions: reward, standards, responsibility, support, and identity. The differences were quite similar to the differences of experience on the present faculty, with the exception that it was people in their first year of experience who had higher mean responses than those with more than ten years of experience. The findings may have been unique to the time period of the study. With the national rate of unemployment at ten percent, nurses who were accepted on a nursing faculty with possibly only a bachelor's degree may equate climate to their feeling of good fortune.

On the climate dimensions of standards, support, and identity those in their first year of experience scored significantly higher than those in their fifth to tenth years of experience. On the responsibility scale those in their first year of experience scored significantly higher than those in their second to fourth years of experience. On the reward scale those with more than ten years of experience had a higher mean response than either those with two to four years of experience or those with five to ten years of experience. Faculty members in their first year in nursing education may on the one hand have felt insecure and therefore have been more aware of the expectations and responsibility placed on them, and may have perceived the organization as being more supportive and the faculty as being friendlier than was perceived by faculty members with more experience. First year teachers may, on the other hand, actually have been the recipients of more help and support.

Faculty members with more than ten years of experience perceived the rewards offered by the organization as greater and more equitable than did those with two to ten years of experience. Faculty members in their first year of nursing education perceived the organization as expecting higher levels of performance, allowing greater autonomy for individuals, being more supportive, and fostering more of a team spirit than did those with more experience — particularly those with two to ten years of experience in nursing education.

It was concluded that both experience on present faculty and experience in nursing education were variables with significant impact on perception of climate.

No other studies were found with which to compare these findings.

Subproblem 6 — Age. How did members of different ages vary in their perceptions of the organizational climate?

Responses were divided into four categories: twenty one to twenty nine year olds, thirty to thirty nine years olds, forty to forty nine year olds, and those over fifty years old.

The standards dimension was the only one in which significant differences were found when perceptions of climate were studied on the basis of age. Those over 50 years of age had a significantly higher mean response than those 30-39 years of age. This finding did not seem surprising, as older faculty members had probably moved up the ranks into administrative positions, and may indeed have had greater performance expectations placed on them.

It must be concluded that age was not a significant factor affecting perception of organizational climate in nursing faculties.

These findings support the conclusions arrived at by Herman et al. (1975). In their study they attempted to identify "the sources of variance associated with employees' responses to their work environment." They found that demographic variables such as age, sex, marital status, family size, number of wage earners in the family, and education accounted for only nine percent of the variance of employees' responses.

Subproblem 7 — Type of Contract. How did faculty members employed on a full time basis differ from faculty members employed on a part time basis in their perceptions of the organizational climate?

There were significant differences in the mean responses of full time faculty members and part time faculty members on the dimension of structure (p < .01), and on the dimensions of reward, support, and identity (p < .05). In each case the higher scores were those of part time faculty members.

The findings indicated that faculty members employed on a part time basis perceived the organization as more structured, offering greater rewards and support, and having a greater sense of identity among its members than did members employed on a full time basis. Part time faculty members are frequently the individuals with the least academic preparation. They are often assigned to clinical supervision only. Consequently, the organization with which they are most familiar is the hospital rather than the university. Part time faculty may, for example, have perceived greater structural constraints because of the highly bureaucratized work setting of the hospital.

Part time faculty may have been satisfied to have a position on a nursing faculty. They may, therefore, have perceived the reward system, support of administration, and team spirit among faculty as satisfying their needs.

It may be concluded that type of contract had an impact on perception of climate, and that part time faculty perceived climate more positively than did full time faculty.

No studies were found identifying differences in perceptions on the basis of full time/part time employment.

Subproblem 8 -- Type of Assignment. How did faculty members with differing assignments differ in their perception of the organizational climate?

Respondents indicated if their major responsibility was in class-room lecturing, clinical supervision, or if they had equal responsibility in both areas of nursing education. The data analysis revealed differences beyond the 0.05 level of significance in the perceptions of the three groups on the structure, responsibility, reward, and support dimensions of climate. Differences beyond the 0.001 level of significance were noted on the conflict dimension. The Scheffé test indicated that on every climate dimension those assigned primarily to classroom lecturing had a higher mean score than those assigned to both classroom lecturing and clinical supervision; and those assigned to both had a higher mean score than those assigned primarily to clinical supervision.

Statistically significant differences were found on five climate dimensions. On the conflict dimension, faculty assigned primarily to classroom lecturing had a significantly higher mean score than either those assigned primarily to clinical supervision or those assigned to both classroom and clinical teaching. The higher mean score of classroom teachers may be explained on the basis of the complexity of relationships in organizations. Faculty members assigned primarily to classroom lecturing were exposed primarily to one organization: a university department in which questioning and differences of opinions have always been acceptable and conflict is generally tolerated.

Faculty members assigned primarily to clinical supervision spent most of their time in a very different organization — the hospital. Nurses have traditionally been accustomed to taking orders. From the vantage point of the hospital, the university may indeed appear to be more tolerant of conflict.

Similarly, it appears understandable that faculty assigned to clinical supervision perceived the degree of structure in the nursing faculty as less restrictive than did faculty members assigned primarily to the classroom. Comparatively, a university department might seem much less bureaucratic than a hospital.

On the responsibility dimension those assigned to the clinical area perceived significantly less autonomy for faculty members than did members assigned primarily to classroom teaching. The differences in responses may again be explained in relationship to the organization with which the member is primarily associated. Although perceptions were of the schools of nursing, members assigned primarily to the clinical area may well have been influenced by the constraints of the bureaucratic hospital setting.

Lastly, faculty members assigned to classrooms perceived greater and more equitable rewards for faculty members than did those assigned primarily to clinical supervision. Possibly many of those members assigned primarily to clinical supervision lacked academic preparation and, therefore, had a lower salary and less opportunity for promotion.

These findings support an assumption made by Evans (1968, p. 113):

Organizational members performing different roles tend to have different perceptions of the climate, if only because of (a) a lack of role consensus, (b) a lack of uniformity in role socialization, and (c) a diversity in patterns of role—set interactions.

It may be concluded that faculty members assigned to clinical supervision perceived the university department of nursing as less structured than did faculty assigned to classroom instruction. Faculty assigned primarily to the classroom perceived the organization as offering more opportunity for autonomous decision making, tolerating more conflict, and offering greater and more equitable rewards to its members.

Relationship Among the Independent Variables

It was recognized that overlap may have existed among the independent variables. No attempt, however, was made to examine

correlations among the independent variables. A summary of the mean responses of faculty members on the climate scales by independent variables, presented in Table 3, indicated major differences in the groupings of the independent variables. None of the independent variables showed significant differences on the same set of climate dimensions.

The analysis of the data showed that some of the variables identified had a greater impact on perception of climate than did others. When faculty members were classified on the basis of rank there were significant differences in perception on six of the nine climate dimensions. There were significant differences on five dimensions on the variables of hierarchy, experience on present faculty, experience in nursing education, and assignment. Perception was affected by type of contract on four climate dimensions. Age of member and tenure each had an impact on only one climate dimension.

TABLE 3

SUMMARIZATION OF SIGNIFICANT DIFFERENCES IN MEAN RESPONSES OF FACULTY MEMBERS

ON THE CLIMATE SCALES BY INDEPENDENT VARIABLES

Independent Variables	Climate Dimensions									
	Structure	Respon- sibility	Reward	Risk	Warmth	Support	Standards	Conflict	Identity	
Hierarchy			Х		Х	Х	35	х	Х	
Rank	Х	х	X			X		X	x	
Tenure			Х							
Experience on Present Faculty		x	х	Х			х		х	
Experience in Nursing Education		х	х			Х	X		х	
Age of Respondent							X			
Type of Contract	Х		Х			Х			х	
Assignment	X	Х	X			X		Х		

It is also noted that there were more significant differences on some climate dimensions than on others. Significant differences on the reward dimensions were noted on seven of the eight independent variables. There were five significant differences on the support and identity dimensions, four significant differences on the responsibility dimension, three significant differences on the structure, standards, and conflict dimension, and only one significant difference on the risk and warmth dimensions.

GENERAL CONCLUSIONS

In determining the impact of group and organizational characteristics on the perception of organizational climate, the findings of the study permit some broad conclusions:

- 1. Within the parameters of the study, group and organizational characteristics did have an impact on perceptions of climate. When studied on the basis of group and organizational characteristics, statistically significant differences were identified in the responses on the climate dimensions.
- 2. The independent variables which related to the member's position in the organization had the greatest impact on perception of organizational climate. The greatest number of significant differences in perception were noted when faculty members were categorized on the basis of rank. This was followed by the length of experience on the present faculty, hierarchical level, total experience in nursing education, type of assignment, and type of contract. Perception was affected on only one dimension when the independent variable was tenure or age.
- 3. The impact of group and organizational characteristics was greater on some dimensions of climate than on others. There were twelve significant differences in group mean responses on the reward dimension; six significant differences in mean responses on the responsibility dimension; four significant differences of mean responses on the structure, support, and identity dimensions; three significant differences of mean responses on the risk dimension; and only one significant different of mean responses on the warmth dimension.

IMPLICATIONS

Implications for Theory

Researchers have suggested that organizational climate theory would profit by research which would investigate group and organizational variables affecting climate (Forehand and Gilmer, 1964, p. 368). Various studies such as those by Herman et al. (1975), Pheysey, Payne and Pugh (1971), Gorman and Molloy (1972) have attempted such research. The present research sought to strengthen findings of previous research by using some of the same variables but in a different setting. A further objective of this research was to add to the findings by adding variables which had not been tested, such as the effect of assignment to clinical or classroom teaching on perception of climate. Primarily, the present study was significant in

its supports of the findings of other studies, which concluded that level or position in the organization affects perception of climate. The present study further examined the impact of group membership on perception. Pace (1968, p. 141) stated: "The study of subcultures and subenvironments is a significant and enriching counterpart to the study of total environments." By the study of "subcultures" (groupings) in Canadian university schools of nursing and by employing several groupings or independent variables which had not been studied previously, a broader understanding of climate in schools of nursing was gained which also added to the general knowledge of climate.

Implications for Practice

"If men define situations as real, they are real in their consequences" (Merton, 1957, p. 421). Various studies have verified that perception of climate affects satisfaction and performance (Pritchard and Karasick, 1973; Kaczka and Kirk, 1968; Friedlander and Margulis, 1969; Costley, Downey and Blumberg, 1973; and Hand, Richards and Slocum, 1973). Because previous studies have shown a relationship between climate perceptions and attitudes and behaviour, knowledge of climate perceptions becomes highly relevant information to the organization's administration.

The findings and conclusions of the present study may be of particular interest to administrators of nursing faculties. Administrators may first inquire as to the reasons for differences in perception. Secondly, administrators may question how climate perception may be changed. In answer to the first question, Evans (1968, pp. 118-120) has discussed rather extensively the process of socializing members into a group. He suggested that climate perception is perpetuated from one generation to another in a group, and is not easily altered even by changes in leadership.

In the university schools of nursing, as in other organizations, the underlying factors which influence how perceptions are perpetuated would have to be altered. This might result in substantial changes in the organizational processes such as a change from unilateral decision making to participative decision making. It might further result in changes in group membership. In schools of nursing the administrators might consider having faculty members who are assigned primarily to clinical supervision assigned to some classroom instruction as well. It might also mean shortening the length of time at which individuals remain at the assistant professor rank, or offering teaching members of faculty some administrative responsibility.

Implications for Further Research

This study examined the impact of selected independent variables on the faculty members' perceptions of organizational climate dimensions in six Canadian university schools of nursing. Several further research concerns related to this study could be pursued.

- 1. Eight independent variables were studied in relation to their impact on perception of climate. Other variables than those selected might have been used and could be used in further studies. Forehand and Gilmer (1964, p. 367) suggested the use of independent group variables such as group maturity, size of group, composition of group, and so on. Similarly, degree of professionalization of the group, or cosmopolitan versus local would add further to the factors affecting perception of climate. Since nursing faculties generally have a vast number of committees, committee structure might be useful in a study.
- 2. An attempt was made by faculty members to describe what they perceived to be reality. Further research, identifying both the actual and the preferred climate, similar to the study undertaken by Gorman and Molloy (1972), would be useful in determining member satisfaction. This would lead to an investigation of the outcome of various climates. Since there are new trends and new expectations in the work force, expectations may change rather rapidly.
- 3. This study focused on the perceptions of faculty members to the exclusion of others who would have perceptions about the organizational climate. Other groups like students or hospital personnel who associate with faculty and students and outsiders might add significantly to an understanding of the climate of schools of nursing. A future study might focus on the difference in perception of students and faculty.
- 4. It would be of interest to examine the perceptions of faculty members of other university departments with practicums to determine if the findings related to the assignment variable were unique to schools of nursing, or if there is similarity among other departments with practicums.

BIBLIOGRAPHY

Andrews, John H. M. School organizational climate: Some validity studies. Canadian Education and Research Digest, 1965, 5, 317-334.

Argyris, C. Integrating the individual and the organization. New York: John Wiley and Sons, 1964.

Borrevik, Berg A. Jr. The construction of an organizational climate description questionnaire for academic departments in Colleges and Universities. A doctoral dissertation, University of Oregon, 1972.

- Campbell, J. P., Dunnette, Marvin D., Lawler, Edward E. and Weick, Karl F. Jr., Managerial behavior, performance and effectiveness. New York: McGraw-Hill 1970.
- Canadian Association of University Schools of Nursing. Newsletter, 1972, 2.
- Cawsey, T. The interaction of motivation and environment in the prediction of performance potential and satisfaction in the life insurance industry in Canada. Paper presented at 16th Annual Midwest Academy of Management Meeting, Chicago, 1973.
- Costley, D., Downey, K., and Blumberg, M. Organizational climate: the effects of human relations training. Unpublished paper, Pennsylvania State University, 1973.
- Dessler, Gary. Organization and management: A contingency approach. Englewood Cliffs: Prentice-Hall, 1976.
- Evans, Williams M. A systems model of organizational climate. In Renato Taguiri and George H. Litwin, (Eds.), Organizational climate: Explorations of a concept. Boston: Harvard University, 1968.
- Forehand, G. A. and Gilmer, G. H. Environmental variations in studies of organizational behavior. *Psychological Bulletin*, 1964, 62, 361-382.
- Fox, Robert S., Schmuck, Richard, Van Egmond, Elmer, Ritvo, Miriam and Jung, Charles. *Diagnosing professional climate of schools*. Fairfax, Virginia: NTL Learning Resources Corp., Inc., 1973.
- Friedlander, R. and Margulis, M. Multiple impacts of organizational climate and individual value systems upon job satisfaction. *Personnel Psychology*, 1969, 22, 171-83.
- George, Julius R. and Bishop, Lloyd K. Relationship of organizational structure and teacher personality characteristics to organizational climate. Administrative Science Quarterly, 1971, 16 (4), 467-75.
- Gorman, Liam and Molloy, Eddie. People, jobs and organizations. Dublin: Mount Salus, 1972.
- Hall, Douglas T. Experience in management and organizational behavior. Chicago: St. Clair, 1975.
- Halpin, Andrew W. and Croft, Don B. The organizational climate of schools. Chicago: University of Chicago, 1963.
- Hand, H., Richards M. and Slocum, J. W. Organizational climate and the effectiveness of a human relations training program. Academy of Management Journal, 1973, 15, 185-95.
- Hellriegel, Don and Slocum, John W. Jr. Organizational climate: Measures, research and contingencies. *Academy of Management Journal*, 1974, 17 (2), 255-280.
- Herman, Jeonne B., Dunham, Randel B., and Hulin, Charles L. Organizational structure, demographic characteristics and employee responses. Organizational Behavior and Human Performance, 1975, 13, 206-32.
- Johnston, H. Russell. A new conceptualization of source of organizational climate. Administrative Science Quarterly, 1976, 21, (1) 95-103.
- Kaczka, E. and Kirk, R. Managerial climate, work groups, and organizational climate. Organizational Behavior and Human Performance, 1969, 12, 252-71.
- Kahn, R., Wolfe, E., Quinn, R., Snock, J. and Rosenthal, R. Organizational stress: Studies in role conflict and ambiguity. New York: Wiley, 1964.
- Kerlinger, Fred N. Foundations of behavioral research. New York: Holt, Rinehart and Winston, 1964.
- Lawler, Edward E. III, Hall, Douglas T. and Oldham, Greg R. Organizational climate: Relationship to organizational structure, process and performance. Organizational Behavior and Human Performance, 1974, 11, 139-55.
- Likert, Renis. The human organization. New York: McGraw-Hill, 1967.

- Litwin, George H. and Stringer, Robert A. Jr. Motivation and organizational climate. Boston: Harvard University, 1968.
- Marrow, A., Bowers, D., and Seashore, S. Management by participation. New York: Harper and Row, 1967.
- McGregor, D. The human side of enterprise. New York: McGraw-Hill, 1960. Merton, R. K. Social theory and social structure. Glencoe: Free Press, 1957.
- Null, Eldon J. Organizational climate of elementary schools. Minneapolis, Minnesota: University of Minnesota, Educational Research and Development Council, 1967.
- Pace, C. Robert. The measurement of college environments. In Renato Taguiri and George H. Litwin (Eds.), Organizational climate: Explorations of a concept. Boston: Harvard University, 1968.
- Educational Testing Service, 1971

 A Prospectus CUES II. Los Angeles: University of California,
- Payne, Roy L. and Mansfield, Roger. Relationships of perceptions of organizational climate to organizational structure, context, and hierarchical positions. Administrative Science Quarterly, 1973, 18, (4), 515-26.
- Pheysey, Diana, Payne, C., Roy, L. and Pugh, Derek S. Influence of structure at organizational and group levels. *Administrative Science Quarterly*, 1971, 16, (1), 61-73.
- Popham, W. James and Sirotnik, Kenneth A. Educational statistics: Use and interpretation (2nd ed.), New York: Harper and Row, 1973.
- Porter, Lyman W. and Lawler, Edward E., III. Properties of organizational structure in relation to job attitudes and job behavior. *Psychological Bulletin*, 1965, 64 (1), 23-51.
- Pritchard, R. and Karasick, B. The effects of organizational climate on managerial job performance and job satisfaction. Organizational Behavior and Human Performance, 1973, 9, 110-19.
- Russell, C. N. The college environment: Assessment techniques. In Abram G. Konrad (Ed.), *Clientele and community*. A Yearbook of the Canadian Community Colleges, Edmonton, Alberta: University of Alberta, 1974.
- Sargent, James C. Organizational climate of high schools. Minneapolis, Minnesota: University of Minnesota, Educational Research and Development Council, 1967.
- Schneider, Benjamin. The perception of organizational climate: The customer's view. Journal of Applied Psychology, 1973, 57, 248-56.
- Schneider, B. and Bartlett C. Individual differences and organizational climate II: Measurement of organizational climate by multidimensional matrix. *Personnel Psychology*, 1970, 23, 493-512.
- Stimson, J. and LaBell, T. The organizational climate of paraguayan elementary schools: Rural-urban differences. *Education and Urban Society*, 1971, 3, 333-49.
- Tagiuri, Renato. The concept of organizational climate. In Renato Tagiuri and George H. Litwin (Eds.), Organizational climate: Explorations of a concept. Boston: Harvard University, 1968.
- Wilson, Walter Gerald. An analysis of changes in the organizational climate of schools. M. Ed. thesis, University of Alberta, (Edmonton), 1966.
- Winch, Robert F. and Campbell, Donald T. Proof? No. Evidence? Yes. The significance of tests of significance. The American Sociologist, 1969, 4, 140-43.

RESUME

L'effet des caractéristiques organisationnelles et collectives sur la perception des professeurs quant au climat qui règne dans les écoles de sciences infirmières.

Cette étude était axée sur l'impact des caractéristiques collectives et(ou) organisationnelles sur la perception du climat qui règne dans certaines écoles universitaires de sciences infirmières au Canada. Les variables indépendantes étaient la hiérarchie, le rang, la permanence, l'expérience, l'âge, le type de contrat et le type de fonctions; quant aux variables dépendantes, il faut citer le climat qui règne dans les structures, les responsabilités, les récompenses, les risques, l'ambiance chaleureuse, le soutien, les normes, les conflits et l'identité.

L'analyse des données a permis de tirer trois conclusions:

- 1. En se basant sur des caractéristiques collectives et organisationnelles, on a pu déterminer des différences statistiquement importantes dans les réponses sur les aspects relatifs au climat.
- 2. On a constaté que c'étaient les variables indépendantes qui avaient trait à la place du membre de la faculté dans l'organisation qui avaient la plus forte incidence sur la perception du climat organisationnel.
- 3. L'impact des caractéristiques collectives et organisationnelles se faisait davantage sentir sur certains aspects du climat que sur d'autres.