A Contingency Model of
Job Satisfaction

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ABSTRACT

The present research study was designed to test a contingency model of job satisfaction based on participation in decision making as the antecedent variable and job involvement as the intervening variable. The instruments used to measure the variables were the participation in decision making scale developed by Siegel and Ruh (1973), the job involvement scale by Lodahl and Kejner (1965) and the job satisfaction construct derived from Hoppock (1935).

The findings indicate that statistically significant correlations do exist for the 1995 educators surveyed in this study. Educators who reported high levels of participation in decision making consistently reported high levels of job involvement ($p \leq 0.001$). Also, teachers reporting high levels of job involvement consistently scored high on their levels of job satisfaction ($p \leq 0.001$). All major hypotheses were supported by the data. Through exploratory hypotheses, the study attempted to develop statements of relationships between criteria of job satisfaction and sex and marital status of employees in the system. The hypotheses received only minimal support, but the results did highlight the impracticability of attempting to develop any such relationships without using definite personality and situational variables as moderators. Differences between male and female socialization, sex discrimination and multiplicity of roles are briefly discussed as possible explanations for the reported findings.
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CHAPTER I

INTRODUCTION

The attempt to build a contingency theory of job satisfaction has frequently focused on personal characteristics of the individual employee. One characteristic that has emerged as a potential contingency factor in job satisfaction is the employee's attitude toward, and level of, participation in the organization's decision making process. A secondary variable is the individual's level of involvement in the job.

There are two reasons for being concerned with the phenomenon of job satisfaction in the teaching profession. First, it can be viewed as an end in itself, as happiness is the goal of life. Secondly, it is studied because it contributes to one's attitude toward family and self, and it can affect one's physical and mental health. Under certain conditions it may also affect other types of on-the-job behaviour. Although job satisfaction appears to have little or no affect on productivity (Locke, 1976).

The purpose of the present study is to explore the influence of employee participation in decision making and job involvement as indicators of job satisfaction in an organizational setting. It is proposed that a high level of participation in decision making and job involvement will indicate a high level of overall job satisfaction.

Job Satisfaction (Locke, 1976) results from the appraisal of one's job as attaining, or allowing the attainment of, one's important job values, providing these values are congruent with, or help to fulfill, one's basic psychological needs.

Smith, Kendall, and Hulin (1969) explained job satisfaction as
feelings of affective responses to the work situation. These responses are achieved through a minimal discrepancy between the work motivation attitude and the incentives offered by the organization. In other words, job satisfaction levels are related to how an individual perceives the differences between what is expected and what is actually experienced in the job situation.

Abbott (1965) posited that a teacher who stays in the system and who feels satisfied has anticipated correctly the relationship between expected performance and the rewards offered by the school board. Inequity exists when the anticipated rewards are not forthcoming following performance or if the rewards are viewed as negative.

Job satisfaction, then, is considered to be a job attitude influenced by a large number of factors or areas of satisfaction. For the purpose of this paper, job satisfaction will be studied as a dependent variable, dependent on the areas of participation in decision making and job involvement.

Participation in decision making was chosen as the primary mediating variable of job satisfaction. Belasco and Alutto (1972) explain participation in decision making as a mode of organizational operation for which decision making satisfied important psychological needs for responsibility and autonomy at work. Participation then, relates to one's effectiveness in, or influences over, organizational decision making.

Argyris (1964), Likert (1961) and McGregor (1960) support this position and extend the concepts to suggest that participation in decision making has a favourable impact on employee responses to the job since this type of behaviour fulfills ego or higher order needs,
such as a need for achievement, status and self-actualization.

Job involvement was chosen as the intervening variable because it appears to be a feedback variable, both a cause and effect of job behaviour (Saal, 1978). Job involvement, like job satisfaction and participation in decision making is related to three classes of working variables: personal characteristics, situational characteristics and work outcomes.

For the purpose of this paper, job involvement will be considered as the interaction between the situational and individual components of involvement. The first consideration is to view job involvement as a function of the situation (Vroom, 1962). It is proposed that job factors can influence the degree to which an employee is involved in the job. Thus performance is perceived to be relevant to certain aptitudes, abilities or other attributes that are central to a person's self-concept. Therefore, it is essential to evaluate the organizational constraints, as these situational factors might influence the individual's job involvement. Secondly, job involvement will be considered as the degree to which a person's work performance affects his self-esteem (Lodahl and Kejner, 1965). In other words, it is the degree to which participants are personally affected by their whole job situation. Job involvement is ultimately based on one's values about the goodness of, or importance of, work in the worth of a person. These values are learned through the earliest experiences and as these experiences operationalize the Protestant Ethic, the child will absorb certain values about work that will resist change throughout his work experience (Baltlis, 1978).

The effect of sex differences on work-related attitudes and
behaviour has long been referred to in the research literature, but it has only been in recent years that researchers have taken a substantial interest in studying individuals in their work environment. To date, only minimal attention has been directed toward comparative studies of male and female attitudinal behavioural differences.

It is the purpose of this study, not only to test a contingency model of job satisfaction, but to determine if female teaching professionals differ significantly from their male counterparts and if married teachers differ significantly from single teachers in their overall level of job satisfaction.

Likert, in his research on effective organizations, builds upon the ideas of self-esteem and work values as being important components in an individual's realization of job satisfaction. Likert's theory stresses the necessity of an employee-centred leadership style. This system perpetuates an employee's participation in decision making as a component of job involvement. Secondly, Likert's theory supports the assumption that high levels of job involvement tend to result in high levels of job satisfaction. Other contemporary research suggests the feasibility of this deductive theory.

The present research is designed to determine whether teachers, male or female, who exhibit a high tendency toward participating in the school's decision making process are also highly job involved and if so, whether this high level of job involvement indicates a high level of job satisfaction.
CHAPTER II

THEORETICAL CONSIDERATIONS

Related Research

Theoretical and research findings from the educational and industrial sectors were used to form the study's framework for predicting relationships. Primary among these is Likert's theoretical model for building effective organizations.

Likert, in his studies since 1947, has been attempting to understand and control job performance and job satisfaction objectives. Data obtained from thousands of employees doing different low-skill jobs to highly skilled research work, identified two leadership styles that influence job satisfaction. These leadership styles are job-centred or employee-centred. Likert's System 4 Organization which is based on the employee-centred style, stresses that participating methods of management created high levels of worker motivation and improved, free flowing communication as well as worker-management interaction. As decision making and goal setting encourage group participation, the central process, which emphasizes self-control and problem solving, is dispersed throughout the organization.

Thus the System 4 Theory proposes that an organization will be optimally effective to the extent that its processes are...

"such as to insure a maximum probability that in all interactions and in all relationships within the organization each member in light of his background, values, desires and expectations, will view the experience as supportive and one which builds and maintains his sense of personal worth and importance." (Likert, 1961, p. 103)

When an organization functions under a System 4 scheme, it perpetuates
the development of the job-involved employee. In other words, the job environment encourages the employee to participate in all components of the job, particularly in the area of decision making, so that his work performance can positively affect his level of self-esteem and eventually lead to job satisfaction.

Research in the area of job involvement appears to focus emphasis on two different concepts. One area focuses attention on the individual whose level of performance is a determinant of his level of self-esteem (Lodahl and Kejner, 1965). However, many researchers have later labelled this a mere measure of intrinsic motivation. The conceptual level of determining job involvement is to consider it a component of self-image. Specifically, to what extent does the individual identify psychologically with his work environment?

Theoretically, job involvement is viewed through three different perspectives: (1) job involvement as an individual difference variable where the value of work is learned at a very early age (Dubin, 1956; Siegel, 1969; Hall and Mansfield, 1971; Hulin and Blood, 1968); (2) job involvement as a function of the situation, where the level of involvement is considered a response to the organizational conditions (Argyris, 1964; McGregor, 1960); and (3) job involvement as an individual-situation interaction where both the individual and job components react. People differ in the degree to which they become involved in their jobs as a function of their background and personal situation. However, one must assume that people will become more involved when they are allowed to use their own abilities (Lawler and Hall, 1970; Farris, 1971; Lodahl and Kejner, 1965; Wanous, 1974).

Although job involvement has basically been defined in terms of
a personal difference variable, it is considered to be partially controlled by situational components. Empirical evidence suggests that job involvement can also be related to participation in decision making (March and Simon, 1958; Ruh and White, 1974; Siegel and Ruh, 1973; Schuler, 1975) and that participation in any or all of these three involvement levels might create a state of high job involvement.

A study to determine the relationship of career orientations of job involvement with job satisfaction (Gannon and Hendrickson, 1973) indicated that the job involvement factor significantly relates to overall satisfaction, to work, supervision and people subscales. In other words, the higher the job involvement, the more satisfied the person. Results of other similar work substantiates that the influence of job involvement on job satisfaction is similar between males and females (Weissenberg and Gruenfeld, 1968; Rabinowitz and Hall, 1977).

Analysis of a few of the over three thousand available studies on job satisfaction provides more support for the complexity of the relationships of job involvement, participation in decision making and job satisfaction.

Schein (1971) states that individual needs are complex and that they maintain a high level of interaction with the organization. Therefore, individuals that are conditioned to seek higher order need satisfaction from their jobs will maintain a high level of participation in decision making (Argyris, 1964; Herzberg, 1966; Likert, 1961; McGregor, 1960). Other situational links between job satisfaction and participation in decision making have been described in detail by Ritchie (1974); Strauss (1963); Lowin (1968); Wood (1973) and Alutto and Acito (1974).
Research in the area of job satisfaction and job involvement generally demonstrates a positive relationship between the two variables. Weissenberg's and Gruenfeld's (1969) results confirm the hypothesis that involvement increased with increasing satisfaction. Therefore, it is logical to assume that a teacher who demonstrates a high level of participation in decision making and is otherwise highly involved in the job would also be highly job satisfied. Gannon and Hendrickson's (1973) study of working wives showed results that found job involvement significantly related to overall satisfaction scores.

The evidence presented points to a potentially complex relationship between higher-order needs, participation in decision making, job involvement and job satisfaction. Teachers have different esteem and growth needs to fulfill and therefore desire different levels of participation and involvement in their school organization. Satisfaction with participation lies in the difference between levels of participation desired and perceived. If teachers have self-actualization and autonomy needs to be satisfied by participation in their jobs - and if this is incongruent with the organizational reality - then these persons will have low job satisfaction. However, if the organizational reality is congruent with the individual's need for high levels of participation, then the teacher will achieve high job satisfaction.

"Increasing levels of participation are associated with greater overall satisfaction with the organization as well as with specific satisfaction with participation."

(Driscoll, 1978, p. 49)

Likert's research on the components of effective organizations, in conjunction with the complex variables of participation in decision making, job involvement and job satisfaction, provide substantial
evidence for the development of a possible contingency model of job satisfaction. Likert's System 4 organization encourages employee participation and involvement in the decisions that concern them. Finally, high job involvement, whether caused or affected by participation in decision making, tends to produce and increase the workers' overall level of job satisfaction.

**Previous Research**

In order to fully grasp the multidimensional concepts of job satisfaction, job involvement and participation in decision making, an extensive review of the literature covering these topics has been included.

(a) **Participation in Decision Making (P.D.M.)**

Participation in decision making has often been studied in light of the assumption that it is influenced by one's attitudes, beliefs, and motives (Driscoll, 1958; Strauss, 1963; Gamson, 1968; Lowin, 1968; Wood, 1973; Alutto and Acito, 1974; Driscoll, 1978).

Patchen (1970), in his research among T.V.A. employees, suggests that along with other consequences, increased participation in institutional decision making leads to greater job satisfaction. However, given the varying shades of participation, not all forms of participation will produce identical or even similar organizational outcomes.

White and Ruh (1973) studied 2755 employees from six manufacturing organizations to determine the moderating effects of individual values on the relationship between participation in decision making and attitudes toward the job. In other words, they studied whether...
participation in decision making and job involvement are more positive for individuals who attach a high importance to these values. Participation in decision making and job involvement were measured by summing the responses to the five-point Likert-type items. A correlation of .53 between participation in decision making and job attitude was computed, indicating that participation in decision making is consistently and positively related to job involvement, motivation and identification with the organization. When this sample was dichotomized to look at participation and involvement for the rank and file workers and managers, significant correlations were computed for both groups. However, further analysis of the causality of this relationship is difficult to explain.

Siegel and Ruh (1973) investigated 2628 manufacturing organizational employees, to determine the relationship of job involvement and participation in decision making, personal background and job behaviour. Job involvement was correlated to participation in decision making and job behaviour for those with higher education than for individuals with less education, and for more urban individuals than for less urban individuals.

The theoretical position of the 'complex man', supports the assumption that there is interaction between the individual and the organization (Schein, 1971; Siegel and Ruh, 1973). This perspective views the individual's needs as complex and variable both between individuals and within individuals over time. Specifically, Schein (1971) theorized that employee responses to the higher order need gratification provided by the job is conditioned by education. However, no further research could be found to support this theory.
Vroom (1959) indicated that employee authoritarianism and need for independence moderate the relationship between participation and satisfaction or performance. However, Tori (1970) tried to replicate this study and found that this relationship did not exist.

Other research has shown that decisional participation can be measured through a discrepancy approach which compares current with preferred levels of participation. Belasco and Alutto (1972), isolated three stages of decisional participation: (a) decisional deprivation where few decisions are influenced; (b) decisional equilibrium where the desired number of decisions are influenced; (c) decisional saturation where too many decisions are influenced. Such a method would provide an indication of an individual's sense of justice concerning her participation in organizational decision making, as well as an indication of her level of job satisfaction. This definition and evaluation is particularly appropriate if we assume the idea that participation in decision making satisfies important psychological needs. Therefore, decreased satisfaction can result from increased decisional deprivation caused by decreased participation in decision making. Consistent with this assumption, the research literature, while far from conclusive, does reveal evidence of a positive relationship between participation in decision making and job satisfaction (Vroom, 1962; Lowin, 1968). The participative management theorists, however, seem to emphasize job attitudes with more direct motivational implications then job satisfaction, such as job involvement, commitment and identification with the organization. Although the research linking participation in decision making with job involvement and job satisfaction is sparse, the research evidence reviewed does show some support for
the basic assumptions of this study. Participation in decision making appears to have positive correlations with both job involvement and job satisfaction.

(b) Job Involvement

The literature on job involvement is also limited, although some research on the personal characteristics of job involvement suggests that under some circumstances job involvement levels are influenced by the individual's education, ego-needs, age, sex, marital status and work values.

Education as "a moderator" of job involvement shows contradictory results. However, it is important to note that education was found to moderate the relationship between job involvement and participation in decision making (Siegel and Ruh, 1973). Teachers then, as members of this higher educational group, might be more job involved because their job training creates a greater ego-involvement due to the centrality of the job to their need gratification.

The relationship of job involvement to age has been supported by some studies (Schwyhart and Smith, 1972; Hall and Mansfield, 1975; Lodahl and Kejner, 1965). However, it would seem that a long-term, longitudinal study could best examine this relationship. Evidence in support of this "older, more involved" theory could be demonstrated by increases in involvement measurements, regardless of job change, over time. Also, job involvement might be moderated by the degree of job success a person experiences.

In a series of laboratory experiments, Lewis (1944) and Lewis and Franklin (1944) established conditions under which ego involvement in work took place. They found that people do become involved, even
in routine tasks when they were given "ego-involving instructions". This statement held true for employees working alone and for employees working on a group task.

Although a significant relationship between marital status and job involvement seems plausible, Gannon and Hendrickson (1973) presented evidence showing that it is quite possible to be involved in both family and job. Lodahl and Kejner (1965) found no relationship between job involvement and marital status for separate samples of engineers and nursing personnel. Since more women are staying in the work force after having their families and more single-parent families involve fathers, it will be interesting to note any differences when the variables of sex and marital status are jointly related to job involvement levels.

Siegel (1969) postulated that women were less likely than men to show high job involvement. Traditional sex-role stereotyping still stresses the importance of males in the producing role and suggests that most women have other roles to fulfill and have other routes for deriving personal satisfactions outside of their work environment. Rabinowitz (1975) found higher average involvement for men than for women when he studied a section of the Canadian government. However, he noted that when the effects of job level and length of service were removed, the sex differences in job involvement disappeared.

Ruh and White (1974) tested the relationship of job involvement and work values with a cross section of white collar public employees. A strong positive relationship between the two variables was established. Rabinowitz's (1975) study of these variables using Canadian public employees also supported this relationship.
Job involvement as a situationally induced variable conflicts with the concepts of individual differences as previously noted. These theorists support the assumption that job involvement depends on components of the organization such as participation in decision making, job level, leadership behaviour, social factors and job satisfaction.

Bass (1965) maintains that job involvement may be strengthened by certain organizational conditions such as opportunities for decision making. Leader behaviour was also indicated as a potential moderator of job involvement. Jones et al (1975) showed that employee's trust and confidence in the organizational leadership are positively correlated with perceived leadership behaviour for the low-involved worker. As Likert suggests, for the system to work effectively, the organization must perpetuate high involvement for individuals or create a relationship of high employee-management trust. The research does not necessarily support this, but it suggests that for a system to run successfully, it should have either high worker involvement or high employee trust levels but preferably a combination of both variables.

Empirical studies relating job turnover and absenteeism to involvement, reinforce the idea that if a person is job involved, he will have less desire to leave the organization. Wicket (1951) found that those operators who had quit the telephone company under study, perceived that they were less ego involved in their work than those operators who chose to remain on the job. However, it must be noted that those operators off the job had, in some cases, not been with the company for a period of two months and this time span might definitely have changed their feelings.
Studying individuals in a manufacturing company, Siegel and Ruh (1973) produced results indicating that job involvement had negative correlations with turnover, whereas no relationship was demonstrated between absenteeism and involvement. Patchen (1965) found negative correlations between job involvement and absenteeism for their work units studied.

Job involvement, as a component of the situational components of job satisfaction and level of participation in decision making, has been discussed fully under these variables. At this time, it is sufficient to restate simply, that positive correlations have been noted between job involvement and job satisfaction.

Researching job involvement as a product of the person-environment interaction, Lawler and Hall (1970) found that job involvement was significantly related to four of five self perceived job measures. The correlations suggest that the more the job is seen to allow the worker to influence what goes on, to be creative, and to use his skills and abilities, the more job involved he will be.

Hackman and Lawler (1971) in viewing higher-order need satisfaction found that individuals with strong desires for higher-order need satisfaction respond much more positively to high level jobs than do individuals who have weaker higher order needs. An important point in this study emphasizes that for optimal results, the psychological demands of the job must be matched to the personal needs of the workers.

From the research available relating job involvement to the three classes of working variables, a basic profile of the involved worker has been presented.
"The job-involved person:
- is a believer in the Protestant Ethic
- is older
- has internal (vs. external) locus of control
- has strong growth needs
- has a stimulating job (high autonomy, variety, task identity and feedback)
- participates in decisions affecting her/him
- is satisfied with the job
- has a history of success
- is less likely to leave the organization."

(Rabinowitz and Hall, 1977, p. 284)

The most recent study on job involvement by Saal (1978), presents findings consistent with those of Rabinowitz and Hall (1977), concerning the influence of age, importance of the Protestant Work ethic, job stimulation, job satisfaction, decreased absences and lack of relationship between job involvement and job performance. However, unlike Rabinowitz and Hall, Saal found that some variables, such as perceived situational job characteristics show stronger relationships to job involvement than other variables. This assumption is consistent with previous findings of Herman and Hulin (1972), Herman, et al, (1975) and Newman (1975). Also contrary to Rabinowitz and Hall, Saal found that personal-psychological variables (need for achievement, Protestant Ethic etc.) are qualitatively different from the set of personal-demographic variables (age, education, sex, etc.) and therefore should not be evaluated by the same means.

Although the research on job involvement is limited, some results link this dimension with participation in decision making and job satisfaction. It is the purpose of this paper to supply added proof that high job involvement is influenced by high levels of participation in decision making and that high job involvement indicates a high level
of job satisfaction.

(c) Job Satisfaction

Miskey, Glasnapp and Hatley (1975) endeavoured to construct a job satisfaction model focusing on the measures of work motivation, incentives and primary life interests. Four comprehensive instruments were combined into a three part survey directed at 3331 educators. The results show that, except for the central office administrative group, there was a significantly positive relationship between primary life interests being focused in the job and high job satisfaction. In other words, if a teacher considers her job as an important component of her life then she would tend to be highly involved and satisfied with the job simply because she had the opportunity to teach. However if the individual's primary life interests are outside the job, then it is these extrinsic factors that will be important in determining job satisfaction. Thus the primary life interests can be considered as possible mediating variables for job satisfaction attitudes.

Age has been found to have a positive correlation with overall job satisfaction (Hunt and Saul, 1975; Glenn, Taylor and Weaver, 1977; McDonald and Gunderson, 1974; Gibson and Klein, 1970; Hulin and Smith, 1965). However, negative correlations between tenure and job satisfaction were noted by Gibson and Klein (1970). Hall, Schneider and Nygren (1970) looked at job involvement and higher order need satisfaction. From a sample of 141 professional foresters, Hall, et al., found a positive correlation between job satisfaction and work autonomy. Thus the teacher who has the opportunity to make decisions about work pace and method, will be more satisfied than a teacher who is not encouraged or allowed to participate in the decisions that
concern her work style.

Gamson (1968), focused almost exclusively on anticipated outcomes of decisions. Therefore, teachers who had high trust in the outcomes of their principal's and/or board's decisions are more likely to be job satisfied. Driscoll (1968), strongly associates with this hypothesis, as he suggests that organizational trust is strongly related to job satisfaction attitudes.

Rosenburg (1956) and Rotter (1971) looked at organizational satisfaction as an extension of ones life satisfaction and global trust levels. This hypothesis suggests that teachers experiencing satisfaction with life will experience a high level of global trust and thus will have increased satisfaction with their organization.

Mischel (1968), Citrin (1974) and Driscoll (1978) argued that this hypothesis could not be supported because there was not sufficient proof that situational differences were not the factors controlling satisfaction. Also, there was insufficient evidence to support the assumption that organizational trust was dependent on personal trust levels.

When various researchers analyzed sex differences in job satisfaction, no conclusive evidence was found. Herzberg, Mausner, Peterson and Capwell (1957) studied fourteen papers directly comparing the sexes in terms of job satisfaction. Of these fourteen, six concluded that women were more satisfied, three reported that men were more satisfied and five found no significant difference. More recent research: Hulin and Smith (1964) and Smith, Kendall and Hulin (1969) indicates that females were less satisfied with the overall job situation. Females were slightly more satisfied with pay but less
satisfied with work, promotional opportunities, supervision and co-workers.

Bartel and Wortman (1975) in their sample of psychiatric hospital workers, found females significantly more satisfied with work and co-workers, but they found no significant difference between males and females in satisfaction with pay, promotions and supervision.

Shapiro and Wahba (1973) studied career men and women in a public service type organization and found that women are less satisfied with their levels of pay, rate of promotion and their overall jobs, than their male counterparts.

Weaver (1974) analyzed a large national sample of professional and technical workers and collected data showing that a greater proportion of the females tend to express less satisfaction with their jobs than the men in similar positions. Similarly, Pecks' (1936) early study of teachers found that women were more critical of their jobs than were men teachers.

Chase (1951) and Alutto and Belasco (1972) reported contradictory evidence on sex differences in job satisfaction for professional teachers and suggested that women teachers tend to be more satisfied than men teachers.

Although there is no conclusive evidence, an explanation of these inconsistencies does exist.

"We do not maintain that sex per se is the critical factor which leads to either high or low satisfaction. It is, rather, the entire constellation of variables which consistently co-vary with sex; for example, pay, job level, promotion opportunities, societal norms etc., that is likely causing the differences in job satisfaction. It is also likely, that if their effects were partialled out, the differences in job satisfaction would have disappeared."

(Hulin and Smith, 1964, p. 91)
Sauser and York (1978) designed a study to test this hypothesis. Two multivariate analysis of relationships between sex and job satisfaction were performed. In the multivariate analysis the possible effects of nine covariate variables was ignored. In the analysis of covariance, the effects of the covariate variable was statistically controlled. The test results do not support the hypothesis above. Therefore, for at least this organization under study, sex is not a major predictor of overall job satisfaction. Thus this study demonstrates that there are a number of variables which modify the sex-job satisfaction relationship.

Based on the research evidence presented, a contingency model of job satisfaction is proposed as represented in Figure 1. The model indicates that individuals who demonstrate a high level of participation in organizational decision making will also indicate a high level of job involvement, resulting in a high level of job satisfaction. Likewise, an individual low in participative decision making and job involvement will be low in her overall job satisfaction. Therefore, the levels of participation in decision making and job involvement are used as indicators of the levels of job satisfaction.

<table>
<thead>
<tr>
<th>Antecedent Variable</th>
<th>Intervening Variable</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>High P.D.M.</td>
<td>High J.I.</td>
<td>High J.S.</td>
</tr>
<tr>
<td>Low P.D.M.</td>
<td>Low J.I.</td>
<td>Low J.S.</td>
</tr>
</tbody>
</table>

**FIGURE 1 - Contingency Model of Job Satisfaction**
Statement of Hypotheses

Empirical evidence strongly suggests that participation in decision making and job involvement are positively and significantly related to job satisfaction. The hypothesized relationship between these variables are as follows:

Hypothesis I:
Teachers who demonstrate high levels of participation in decision making will tend to demonstrate high job involvement and this high level of participation and involvement will create high levels of job satisfaction with their work.

Hypothesis II:
Teachers who demonstrate low levels of participation in decision making and who have low levels of job involvement will experience low levels of overall job satisfaction.

The following ancillary hypotheses were formulated to explore whether, and how, female teachers differed from their male counterparts in levels of participation in decision making, job involvement and overall job satisfaction.

Hypothesis III:
Female teachers will generally have lower levels of participation in decision making than their male counterparts, indicating a lower level of overall job satisfaction.

Hypothesis IV:
Single female teachers will demonstrate a higher level of participation in decision making, job involvement and job satisfaction than married females, whereas married males will demonstrate higher levels of participation, involvement
and satisfaction than single males.

Although the literature reviewed earlier suggests the feasibility of the associations proposed in the major hypotheses, it is hoped that the present research study will provide statistical evidence supporting the assumption that teachers need high levels of participation in their school's decision making in order to maintain high levels of job involvement and to achieve high levels of job satisfaction. Evidence of this nature would support Likert's System 4 Theory and would provide valuable information for the management and supervisory personnel in the various school boards of Ontario.
CHAPTER III

EXPERIMENTAL DESIGN

The Instrument

A. Participation in Decision Making

The participation in decision making scale measures the degree of influence participants have in decisions affecting their jobs. The five items, although developed by Siegel and Ruh (1973), were based on an earlier study of personality determinants of participation by Vroom (1960). Vroom's findings supported the assumption that the effects of participation in decision making depend on the personality type of the individual. Therefore, if a person derives satisfaction from having input into and successfully carrying out a decision, then the more an individual influenced a joint decision, the more satisfaction he can obtain from its successful execution.

The participation in decision making scale was revised on the basis of a series of item and cluster analysis. Initially, the items were clustered on the basis of face validity and the results of earlier analysis. Secondly, the items were regrouped on the basis of inter-item correlations, inter-cluster correlations and alpha estimates of interal consistency (Siegel and Ruh, 1973). In the analysis, the sample was divided into high, medium and low subgroups that corresponded to the distributional breakdown of the sample. Finally, the correlations between participation in decision making and the various job values were computed within each of the sub groups.

The items ask the respondents to evaluate their own level of participation by responding to such statements as:
"In general, how much say or influence do you have on how you perform your job?" The respondent is required to rate these items on a score of one (very little influence) to a score of five (very much influence). The sum of the responses constitutes the participation in decision making score. A score of five indicates minimal participation, whereas, a score of twenty-five indicates maximal participation. (The complete instrument is given in the Appendix.)

B. Job Involvement

Six statements measure the degree to which participants are involved in their jobs. It is important to note that this variable is measured independently of satisfaction, motivation, alienation or happiness.

The job involvement scale was adapted from Lodahl and Kejner (1965). In the original scale, one hundred and ten questions concerning various aspects of job involvement were collected. Through elimination of similar items and an extensive evaluation of the remaining statements by a committee of expert judges, this number was reduced to forty items. A Likert-type analysis was performed, establishing a format with the response categories of strongly agree = 1; agree = 2; disagree = 3; and strongly disagree = 4. The scale was then administered to the nursing personnel of a large general hospital and the scores were intercorrelated and factor analyzed.

By considering the item total correlations, the communality of the item and the factorial clarity of the item, the questionnaire set was reduced to twenty. This new test was administered to a group of engineers as part of a larger attitude survey. These results were
compared to the data from the nurses' survey. The correlation between the original 40-item total and the final 20-item total was .88. Although a fair amount of loss in the item reduction is noted, further factor analysis indicated the presence of a general job-involvement factor over the twenty items.

The reliability of the 20-item scale was computed and then corrected by using a nonparametric measure of correlation (Spearman-Brown formula). The reliability, though barely adequate, indicates that "job involvement is not a very internally consistent attitude but perhaps this is reasonable in light of its multidimensionality and low inter-item correlations" (Lodahl and Kejner, 1965, p. 30).

To shorten the job involvement scale, the six items scoring highest on the unrotated principal component in each sample were reanalyzed. Since 76% of the variance in the 20-item total is accounted for in these six final items, it is reasonable to substitute this shortened scale for the long 20-item scale.

To measure the validity of the scale, Lodahl and Kejner analyzed the degree to which the item measures discriminated significantly among the students, nurses and engineers tested. The results showed that the three groups did differ significantly ($F = 4.84; p \leq .01$). Secondly, the scale was compared with other variables. Significant correlations were noted between the job involvement scale and age for the nursing personnel, job involvement and supervisory qualities for student nurses, and job involvement and job satisfaction for engineers.

The 6-item job involvement scale requires the respondent to rate such items as "The major satisfaction in my life comes from my job", on a scale of 1 (strongly agree); to 5 (strongly disagree). The
sixth item, "most things in my life are more important than my work", although recorded on the same grid as the other five items, is scored in reverse order. Thus, if the respondent strongly agrees with this statement, the one indicated will be scored as a five. In the total analysis the higher the respondent's score, the lower her overall job involvement. (The complete instrument is given in the Appendix.)

C. Job Satisfaction

The job satisfaction construct is derived from the work of Hoppock (1935). He developed a job satisfaction measure consisting of a battery of four questions related to various aspects of job satisfaction.

Nichols, Stahl and Manley (1978) examined the validity and reliability of Hoppock's job satisfaction measure for respondents in a wide variety of job categories; work environments, age, sex, racial groupings, and economic levels. Since significantly different mean job satisfaction scores were obtained in the four studies, the data permit examination of the measure for consistent behaviour across a wide spectrum of circumstances. The test was evaluated for construct validity, concurrent validity, convergent validity and reliability.

(a) The analysis exposed three desirable properties of distribution, allowing comparison of job satisfaction levels of the subgroups in the various samples. (b) The analysis supported the assumption that each item measures the same underlying factor and that all four, equally weighted questions are important in arriving at the overall measure.

Hoppock's measure shows a significant association with all five of the Job Description Index scales as well as a strong association between satisfaction with work and job satisfaction. Finally, reliability was established by using coefficient Alpha (Nunnally, 1967) to provide
further evidence of the effectiveness of Hoppock's measure.

The overall job satisfaction score is obtained by summing the responses to four, equally valued questions, yielding a total score of between four and twenty-eight. Each question consists of a rating scale from one to seven. A total score of four, or a one scored on each question, indicates minimal job satisfaction. Respondents were asked to indicate their response to statements such as the following:

Which one of the following best tells how well you like your job -

(a) I hate it.
(b) I dislike it.
(c) I don't like it.
(d) I am indifferent to it.
(e) I like it.
(f) I am enthusiastic about it.
(g) I love it.

(The complete instrument is given in the Appendix.)

Two surveys completed at two month intervals by each of the thirty six graduate students involved in the research were used to establish the test-retest reliability coefficients. The reliability coefficients for the variables under study were all high: job involvement .72; job satisfaction .71; participation in decision making .70, indicating that the measures were reliable for the population sampled.

The Sample

Altogether, 1995 educational employees from across Southern Ontario participated in the attitudes survey. Of the total sample,
1407 were teachers, 259 were department heads, 179 were principals or vice-principals and the remaining 138 were either directors, specialists or others.

When the sample from this survey is compared with the general survey data for the province of Ontario (Education in Canada; A Statistical Review, 1978/79), some common characteristics are evident. Seventy-eight percent of the total educational population of Ontario is made up by classroom teachers compared with 70% of the sampled population; 9% of the provinces educators are department heads compared with 8% of the sample, and 3% are principals or vice-principals compared with 8% of the survey's population.

The percentages of males and females for the provincial and survey populations are identical with 53% being female and 47% being male. Since this breakdown of the main demographic variables resembles the breakdown of these same variables for the entire province, it adds further support for the reliability of the finding of this study for predicting teacher's attitudes across Ontario.

Although the entire sample consists of members of the teacher profession, it is important to analyze the demographic information and view its finer components. Table 1 provides this necessary breakdown. In particular, this study will refer directly to the variables of sex and marital status.

**Procedures**

Graduate students involved in the study, acted as the liaison person and distributed the questionnaires and cover letters to schools of their choice. The cover letter described the research as examining
the various attitudes of teachers concerning their job, and assured all respondents that the questionnaire was to be done anonymously and that participation was voluntary. School contact teachers for most cases, were personal acquaintances who had agreed to distribute the survey to their colleagues and encourage full participation. The completed questionnaires were either returned by individual teachers or deposited in a special envelope to be returned collectively by the contact teacher.

The graduate students coded and scored all of the questionnaires returned and recorded the statistical data on master sheets. The surveys and master sheets were forwarded to Brock University where the data were fed into the computer for analysis.

Analysis of variance was used as the major statistical approach to analyze the data. Based on the results of other such studies involving similar variables, this technique provides us with a clear understanding of the relationship between the variables measured (Driscoll, 1978; Batlis, 1978; Rabinowitz, et al., 1977; Ruh, et al., 1975).

T-test analysis was used as a statistical method to compare two groups (female/male; single/married) within the same sample. Hollon and Gemmill (1976) used the same technique to analyze their data comparing females and males for levels of job satisfaction.
<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Characteristic</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female</td>
<td>1065</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>911</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>16</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>398</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>1474</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>15</td>
</tr>
<tr>
<td>Education</td>
<td>No Degree</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>Bachelors</td>
<td>1210</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>366</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>11</td>
</tr>
<tr>
<td>Experience</td>
<td>Less than 2 yrs.</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>3-5 yrs.</td>
<td>286</td>
</tr>
<tr>
<td></td>
<td>6-10 yrs.</td>
<td>521</td>
</tr>
<tr>
<td></td>
<td>More than 10 yrs.</td>
<td>1036</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Type of School</td>
<td>Elementary</td>
<td>838</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>975</td>
</tr>
<tr>
<td></td>
<td>Community College</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>50</td>
</tr>
<tr>
<td>Income</td>
<td>Under $15,000</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>$15,000-20,000</td>
<td>496</td>
</tr>
<tr>
<td></td>
<td>$20,000-25,000</td>
<td>518</td>
</tr>
<tr>
<td></td>
<td>Over $25,000</td>
<td>789</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>18</td>
</tr>
<tr>
<td>Age</td>
<td>Under 25</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>913</td>
</tr>
<tr>
<td></td>
<td>36-45</td>
<td>620</td>
</tr>
<tr>
<td></td>
<td>Over 46</td>
<td>343</td>
</tr>
</tbody>
</table>
CHAPTER IV

PRESENTATION OF RESULTS

Results are reported in two sections. First, tests of the moderating effects of participation in decision making and job involvement on job satisfaction are reported. Next, the moderating effects of participation in decision making and job satisfaction outcomes are compared for females and males; married and single respondents.

The intercorrelations matrix of the one dependent variable, job satisfaction, and the two independent variables, job involvement and participation in decision making, is given in Table 2. The data show that all three variables are significantly correlated.

Effects of Moderators on J.S.

It was predicted that there would be a positive, significant relationship between levels of participation in decision making and job involvement and levels of job satisfaction. In other words, a high level of participation in decision making will indicate a high level of job involvement and likewise, these will lead to a high level of job satisfaction.

The results presented in Table 2 provide support for the first hypothesis. In order to test the hypothesis, the independent variables were broken down into high, medium and low groups. If a person's total score was 16 or less on the P.D.M. scale, that person was classified as being low in P.D.M., vice versa, if a person's score was equal to or greater than 21, that person was considered to be high on P.D.M. Because of reverse order scoring on the J.I. scale,
TABLE 2

Intercorrelations of the Three Variables
(N = 1995)

<table>
<thead>
<tr>
<th></th>
<th>J.S.</th>
<th>J.I.</th>
<th>P.D.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.S.</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.I.</td>
<td>.36</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>P.D.M.</td>
<td>.47</td>
<td>.23</td>
<td>-</td>
</tr>
</tbody>
</table>

All correlation coefficients are significant at .001.

TABLE 3

Analysis of Variance: Job Satisfaction by Participation in Decision Making

<table>
<thead>
<tr>
<th>Description of Subpopulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>For Entire Population</td>
</tr>
<tr>
<td>Low P.D.M. Group</td>
</tr>
<tr>
<td>High P.D.M. Group</td>
</tr>
</tbody>
</table>

Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>F.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2930</td>
<td>2</td>
<td>173.41</td>
<td>0.000</td>
</tr>
</tbody>
</table>
those respondents scoring 16 or less, were considered as highly job involved; vice versa, if they scored 20 or more, they were considered only slightly involved in their jobs. The dependent variable, job satisfaction, was not divided into groups, but the whole range of scores (5 to 25) was used.

In this analysis, only the respondents scoring in the top third and the bottom third were compared.

Secondly, when the criterion variable of job satisfaction was broken down and compared with job involvement, further support for the major hypothesis was evident. Before presenting the data it is important to note the reverse order scores, where low job involvement scores indicate high job involvement.

Analysis of the data, as presented in Table 4 shows outcomes as predicted by the hypothesis. Low job involvement scores prove to be highly significant with the high mean job satisfaction scores.

Finally, when the criterion variable of job satisfaction is broken down by both participation in decision making and job involvement simultaneously, the results indicate further support for hypotheses I and II. Results presented in Table 5 confirm that teachers low in participation in decision making and low in job involvement are less job satisfied than teachers low in participation in decision making and high in job involvement. Likewise, teachers high in participation in decision making and low in job involvement are less satisfied than teachers high in participation in decision making and high in job involvement.

The data presented provide support for hypotheses I and II and the proposed Contingency Model of Job Satisfaction. It can now be
assumed from these results that teachers need to be allowed to participate in decisions about their job environment in order to become highly involved in the substance of their job.

**Comparison by Sex and Marital Status**

It was predicted in hypothesis 3 that female teachers would generally have lower levels of participation in decision making than their male counterparts and that this condition will result in lower levels of job involvement and overall job satisfaction for the female teacher. T-test analysis results depicted in Table 6 indicate that female teachers do have a significantly lower level of perceived participation in decision making. The results also suggest, though not at a statistically significant level, that the female teacher may be more involved in her job and generally more satisfied than the male teacher. In other words, the statistical evidence does not support the statement that lower levels of participation in decision making for females and males are associated with lower levels of job involvement and job satisfaction for females and males.

The fourth hypothesis states that single females and married males have higher levels of participation in decision making, job involvement and job satisfaction than do married females and single males respectively. The results of the T-test analysis of these demographic variables, as shown in Table 7, do provide partial support for these hypotheses. For female teachers, only one prediction was confirmed: single females are more job involved than their male counterparts (p ≤ .007). Contrary to the hypothesis, the analysis also shows that married females are significantly higher in job satisfaction than single females (p ≤ .001).
### TABLE 4

Analysis of Variance: Job Satisfaction by Job Involvement

<table>
<thead>
<tr>
<th>Description of Subpopulations</th>
<th>Sum</th>
<th>Mean</th>
<th>S.d.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Entire population</td>
<td>41355</td>
<td>20.89</td>
<td>3.01</td>
<td>1979</td>
</tr>
<tr>
<td>Low J.I. Group</td>
<td>13555</td>
<td>19.73</td>
<td>3.51</td>
<td>687</td>
</tr>
<tr>
<td>High J.I. Group</td>
<td>15145</td>
<td>21.91</td>
<td>2.82</td>
<td>691</td>
</tr>
</tbody>
</table>

### Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>F.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1669</td>
<td>2</td>
<td>91.726</td>
<td>-.000</td>
</tr>
</tbody>
</table>

### TABLE 5

Analysis of Variance: Job Satisfaction by Participation in Decision Making and Job Involvement

<table>
<thead>
<tr>
<th>Description of Subpopulation</th>
<th>Sum</th>
<th>Mean</th>
<th>S.d.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Entire Population</td>
<td>41338</td>
<td>20.90</td>
<td>3.15</td>
<td>1978</td>
</tr>
<tr>
<td>Low P.D.M. Low J.I. Group</td>
<td>3226</td>
<td>20.55</td>
<td>3.21</td>
<td>157</td>
</tr>
<tr>
<td>Low P.D.M. High J.I. Group</td>
<td>5391</td>
<td>18.27</td>
<td>3.78</td>
<td>295</td>
</tr>
<tr>
<td>High P.D.M. Low J.I. Group</td>
<td>5340</td>
<td>22.92</td>
<td>2.34</td>
<td>233</td>
</tr>
<tr>
<td>High P.D.M. High J.I. Group</td>
<td>2770</td>
<td>21.64</td>
<td>2.83</td>
<td>128</td>
</tr>
</tbody>
</table>

### Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>D.F.</th>
<th>F.</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2915</td>
<td>2</td>
<td>172.17</td>
<td>0.000</td>
</tr>
</tbody>
</table>
### TABLE 6

T-Test: Participation in Decision Making, Job Involvement and Job Satisfaction by Sex

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex</th>
<th>N</th>
<th>Mean</th>
<th>t.</th>
<th>df.</th>
<th>Prob.(2 Tail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.D.M.</td>
<td>Male</td>
<td>1064</td>
<td>18.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>909</td>
<td>17.48</td>
<td>5.15</td>
<td>1971</td>
<td>0.000</td>
</tr>
<tr>
<td>J.I.</td>
<td>Male</td>
<td>1060</td>
<td>18.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>906</td>
<td>17.83</td>
<td>1.03</td>
<td>1964</td>
<td>0.303</td>
</tr>
<tr>
<td>J.S.</td>
<td>Male</td>
<td>1059</td>
<td>20.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>910</td>
<td>21.04</td>
<td>1.53</td>
<td>1967</td>
<td>0.126</td>
</tr>
</tbody>
</table>

### TABLE 7

T-Test: Participation in Decision Making, Job Involvement and Job Satisfaction by Sex and Marital Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex</th>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>t.</th>
<th>df.</th>
<th>Prob.(2 Tail)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.D.M.</td>
<td>female</td>
<td>single</td>
<td>240</td>
<td>17.10</td>
<td>-1.76</td>
<td>832</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>594</td>
<td>17.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>single</td>
<td>156</td>
<td>17.48</td>
<td>-3.17</td>
<td>1028</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>874</td>
<td>18.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J.I.</td>
<td>female</td>
<td>single</td>
<td>240</td>
<td>17.26</td>
<td>-2.71</td>
<td>829</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>591</td>
<td>18.13</td>
<td>-2.71</td>
<td>829</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>single</td>
<td>156</td>
<td>16.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>870</td>
<td>18.30</td>
<td>-3.95</td>
<td>1024</td>
<td>0.000</td>
</tr>
<tr>
<td>J.S.</td>
<td>female</td>
<td>single</td>
<td>241</td>
<td>20.37</td>
<td>-3.72</td>
<td>833</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>594</td>
<td>21.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>single</td>
<td>156</td>
<td>20.75</td>
<td>-0.28</td>
<td>1023</td>
<td>0.781</td>
</tr>
<tr>
<td></td>
<td></td>
<td>married</td>
<td>869</td>
<td>20.83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For male teachers, the married male has significantly higher levels of participation in decision making than the single male \((p \leq .002)\), but for job involvement, the single male has been proven as significantly more involved than the married man \((p \leq .001)\).

It is interesting to note here, that both single females and single males are significantly more job involved than their married equivalents.

Much of the data presented provide support for the Contingency Model of Job Satisfaction. Other results, although not supporting the major assumptions of the paper, provide important considerations to be analyzed and understood by the members of the educational administration. These considerations and concepts will be discussed in detail along with the major theories and hypotheses in the next chapter.
CHAPTER V

DISCUSSION OF RESULTS

P.D.M. as a Determinant of Job Attitudes

The major hypotheses in this study are derived from the assumption that decision making procedures in an educational environment affects the job involvement and satisfaction levels of its teachers. The empirical data presented in this study support this hypothesis and provides evidence in support of Likert's employee-centred organizational theory as well as support for this study's proposed model of job satisfaction.

On the whole, the results show that participation in decision making is a determinant of job attitudes, such as job involvement and job satisfaction, as advocated by Argyris (1964), McGregor (1960) and Likert (1961). The results are also consistent with previous research mentioned which found job involvement to be positively related to other job characteristics similar to participation in decision making (Lawler and Hall, 1970; Patchen, 1965).

Participation in decision making is considered an active orientation towards the job in two ways. First, it is a valuable goal in itself, permitting the expression of greater self-esteem and greater job satisfaction. Second, it must precede any attempt to develop a democratic educational environment.

Teachers, because of the nature of their profession, are individuals exposed to the goals of higher education. Educational ambition is stimulated by an individual's higher order need deficiencies. In other words, an individual who strives to achieve the educational level
necessary to become a teacher is probably an individual with high ego needs. It is these needs that supply the energy and effort to accomplish the academic qualifications necessary for certification in the profession. It is also these high order needs that drive a person to become involved in her job, as involvement focuses on one's ability to project skills and competencies into an active, visible force.

If we assume that teaching attracts idealistic and socially motivated individuals, it follows that if a teacher is to be job satisfied, then she must see and feel that her day to day working conditions provide opportunities for self-actualization (Maslow, 1954). This self-actualization or need to fulfill oneself by maximizing the use of abilities, skills and potential is an achievement made possible in teaching. Although the teaching environment has the potential to provide the stimuli for individual and organizational growth, much of what actually transpires depends on the overall philosophy of the organization, since it is this philosophy that determines the goals and creates the atmosphere that encourages employee participation. Therefore, if the Board of Education's policy is one of concern for the needs, potential and welfare of its teachers, the primary level administrators or principals would be encouraged to involve the staff members in the decisions concerning their immediate work environments. This atmosphere of trust and openness provides a conducive environment for teachers to gage their personal level of involvement to their present need deficiencies. Fulfillment of some of these needs is a prerequisite to job satisfaction.

At this time, it is important to differentiate the levels of involvement proposed by Belasco and Alutto (1972). Since personality
variables create different levels of ego need, equal levels of perceived participation can be based on different levels of contribution. A teacher with average need deficiencies can feel highly satisfied with her job because her level of involvement is perceived as being in a state of equilibrium because she influences a desired number of decisions. Other staff members who have the same level of influence might be highly unsatisfied because they view their contribution as less than actually desired. Still others may feel "decisional saturation" at this same point.

The implications of these findings are extensive, particularly in these times of declining enrolment, decreasing job security and increasing public criticism of the educational system. The uncertainty of the present time might suggest that job satisfaction is a rare characteristic among the present teaching ranks. However, this research suggests that individual job satisfaction is an attainable plateau when the administrative philosophy is not one of constraint, but instead creates and perpetuates an atmosphere of trust and involvement. This environment allows individual teachers to achieve a state of equilibrium between their desired and perceived levels of participation in decision making and job involvement. It is this state of equilibrium that results in high job satisfaction. Thus we have a plausible determinant to explain the significant correlations between high levels of participation in decision making, job involvement and job satisfaction or between low levels of participation in decision making, job involvement and job satisfaction.

Although the results of this study indicate a high level of support for the Contingency Model of Job Satisfaction as proposed in
Hypotheses I and II, additional research might attempt to study this model in view of the various leadership styles. A comparison of the factors of participation in decision making, job involvement and job satisfaction based on an employee-centred leadership style versus a task-centred leadership style might produce further support for, and a clearer understanding of the dimensions of job satisfaction.

Sex and Marital Status as Determinants of Job Attitudes

The two ancillary hypotheses of this study were aimed at establishing whether, and how, female teachers differed from their male counterparts in levels of participation in decision making, job involvement and overall job satisfaction. Some important statistical results were noted when the major variables were broken down by the demographic variables of sex and marital status.

When the first demographic variable of sex was analyzed against the major criterion variables, the results indicated that males were significantly \( p \leq 0.001 \) higher only in their levels of participation in decision making. No other significant correlations were noted. Consistent with existing research, these results lead us to conclude that female teachers differ from male teachers in their actual level of participation in the school's decision making process. This finding lends support to the general proposition that females generally have less power in organizations than males (Hollon and Gemmill, 1976). These results and the lack of further significant relationships between sex and levels of job involvement and job satisfaction, provide further support for the findings of Sauser and York (1978), that although sex differences significantly predict levels of participation in decision
making, sex cannot be used as a predictor of overall job satisfaction.

Several tentative explanations of these findings warrant discussion. First, these differences between the sexes might be due to the differences in socialization of the male and female. Although contemporary times indicate efforts to change this socialization process, our past experiences show that males were encouraged to develop independence of thought and action from the earliest age. Females, however, were encouraged to follow a fairly structured, passive orientation towards the work situation that might account for their behaviour of exercising less influence over their work situation (Hollon and Gemmill, 1976).

Secondly, a plausible explanation for these noted differences in participation might involve various forms of sexual discrimination. Since overt sexual discrimination is controlled by regulations and laws, we must consider the effects of more subtle forms of discrimination such as overlooking qualified females when considering promotions or not involving female staff in discussions prior to major decisions.

Certainly the data presented do not provide statistical evidence to support these possible explanations. However, these areas are important factors to consider in future research pertaining to the understanding of how sex differences lead to differences in experienced participation, involvement and satisfaction.

When the second demographic variable of marital status was analyzed against the results of the female-male responses to participation, involvement and satisfaction, other interesting behaviour trends were noted. Although the hypothesized relationships failed to reach significance, the correlations between job involvement for single male and female teachers
were high (p ≤ 0.001). Careful consideration of these data confront us with a rather difficult situation to explain. Certainly it seems feasible that single women should be more job involved than married women as they do not have the added responsibility of a family and home to co-ordinate. However, it is more difficult to explain why a single male is more job involved than a married male, since it is generally the married man who has been socialized to assume the role of the main family breadwinner. This social norm suggests that the married male would have more at stake in his job and career. This factor along with a more settled home life would allow him the freedom to expand his work-related interests and become more involved in his job. However, for the sample under study these explanations do not hold true as single males have significantly higher levels of job involvement.

When the criterion variable of job satisfaction was broken down by both demographic variables, there were no significant differences in level of satisfaction for married and single males. However, married females were significantly (p ≤ 0.001) more satisfied than their single counterparts.

Since previous research in this area is limited, it is difficult to propose plausible explanations for the results recorded. One point to consider involves the different expectations brought to the job by single and married teachers. In many cases, a married female teacher may assume marital roles that make substantial demands on her forcing her to take a less active role in her work situation. This situation may be particularly important if the female considers her work as secondary to raising her family and caring for her home. Therefore,
since her job expectations are more limited, she is more easily job satisfied than her single counterpart who might use her job environment to satisfy her ego need deficiencies.

Limitations of the Collection Procedures

Although the reliability coefficients for the variables under study are high, it is important to note the limitations of the study's collection procedures that might affect the overall results of the survey.

The length of the questionnaire was a major factor. Since completion of all the questions required from thirty to forty minutes, we must assume that the respondents were motivated from the beginning. These respondents, motivated by their interest in and devotion to the job, would answer questions after careful consideration of the possible alternatives. Others, motivated by the feeling of obligation to help a friend accomplish her course requirements, might complete the survey without sufficient thought, marking scores that do not realistically indicate their job situation. Finally, since completion of the questionnaire was voluntary, the scores from many less involved individuals who chose not to participate are not part of the analysis and thus affect the overall significance of the study.

The property of self administration poses other problems, as the survey did not require the respondent to designate when the questions were completed. Because of its length, different sections might have been scored at various times, during various different moods, affecting the continuity of the scores within a given questionnaire.

The data collection for the 1995 sample was spread over a period
from the spring of '79 to the late fall of '79. This time span creates a distinct difference in attitude between teachers ending a busy school term in the spring and those teachers returning to school refreshed from their long vacations. Therefore, results recorded from the data collected during the spring might differ significantly from those recorded in the surveys completed in the fall. However, the analysis of this difference has not been considered as part of this study.

Although the surveys were filled out anonymously, the extensive demographic information required might have caused some to respond less than accurately. This situation was particularly relevant for teachers and administrators from smaller schools as it was often easy to ascertain from these demographic data the identity of the respondents. However, the school liaison person was encouraged to take all necessary steps to guarantee the confidentiality of the individual's questionnaire responses.

Besides limitations of the collection procedure it is essential to explore other areas to determine further reasons for possible misinterpretation of the data.

The applicability of the instrument must be evaluated, as the participation in decision making and job involvement rating scales were not set up for use with the teaching population. However, all of the rating scales have been widely used in other organizational settings and therefore should yield reliable results for the educational population. Future studies may attempt to duplicate this research with a similar sample using other procedures to evaluate attitudes and compare these results to determine whether the score from these rating
scales are reliable, valid and significant.

A second concern is that all educators; teachers, principals, and board administrators are included in the sample. Future studies might attempt to analyze the data for each of these demographic groups and to compare the results to determine differences in attitude for the separate groups. Although the administrative group is a proportionally small part of the total sample, most of these administrators are males, and therefore these scores added to the total sample may be responsible for changes in predicted outcomes.

Finally, the major findings of this study suggest that there may be a number of variables which modify the sex-job satisfaction relationship. Further researchers of job satisfaction should note sex differences in these underlying variables and interpret their results in light of any such differences.

This research has exposed the necessity of developing a more comprehensive model of job satisfaction. This model, as presented in Figure 2, stresses the need of evaluating personal characteristics, such as psychological needs of the individual, along with situational characteristics, such as leadership style, to determine the significance of these variables as modifiers of participation in decision making, job involvement and job satisfaction. Such a model might be used as the basis for future research on job satisfaction.
Personal Characteristics

Individual's Psychological Needs

Organizational Leadership Style

P.D.M.

J.I.

J.S.

Situational Characteristics

FIGURE 2 - Theoretical Model of Job Satisfaction
CHAPTER VI

SUMMARY AND CONCLUSIONS

The major conclusion of this research is that levels of job satisfaction can be predicted by levels of participation in decision making and job involvement. Although correlational data are insufficient to suggest a general phenomenon, the findings are significant and appear to warrant further research, possibly through a longitudinal study.

The major theoretical significance of these findings concerns the focus on participation and involvement assumed when analyzing the effects of organizational decision making on an individual's job satisfaction level. When teachers agree on the system's goals, then the analysis of decision making shifts to other issues such as satisfaction of higher order needs achieved through job involvement.

The major practical significance of these findings involve the organizational philosophy and styles of leadership perpetuated by the educational system. If the organizational philosophy lends itself to an employee-centred style of leadership, then individuals will be encouraged to participate in all of the decisions that concern their working environment. Since high levels of employee participation in decision making cost time and efficiency in any organization, the goal must be that high levels of job satisfaction for the teacher will ultimately accomplish a higher level of educational stimuli and success for the various students working with these teachers.

Finally, this research has highlighted the impracticability of attempting to develop a simple statement of the relationships between
the criteria of job satisfaction and the sex and marital status of employees in an organization. Personality variables such as attitudes, needs and expectations and such situational variables as leadership style appear to play a part in determining the nature of empirical relationships observed between participation in decision making, job involvement and job satisfaction.

An adequate understanding of job satisfaction in Southern Ontario schools, requires extensive insight into the individual levels of participation in decision making and job involvement. As stated by Driscoll (1978), participation and involvement, specifically the congruence between their desired and perceived states, strongly predicts the specific attitudes of satisfaction. This study has provided another link to these integrative assumptions. That is, that high levels of participation in decision making and job involvement significantly indicate high levels of job satisfaction and conversely, that low levels of participation in decision making and job involvement indicate low levels of job satisfaction.
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APPENDIX 1

The Measuring Instrument

The following section deals with some aspects of decision making in your school/college.

In general, how much say or influence do you have on how you perform your job?

To what extent are you able to decide how to do your job?

In general, how much say or influence do you have on what goes on in your school/college?

In general, how much say or influence do you have on decisions which affect your job?

How receptive is your boss to your ideas and listens to your suggestions?

The following questions relate to some of your feelings toward your job. Please check the response which comes closest.

The major satisfaction in my life comes from my job.

The most important things that happen to me involve my work.

I am really a perfectionist about my work.

I live, eat and breathe my job.

I am very much involved personally in my work.

Most things in my life are more important than work.
Four questions relate to your job satisfaction. Please circle one response for each question.

Which one of the following shows how much of the time you feel satisfied with your job?

A. Never
B. Seldom
C. Occasionally
D. About half of the time
E. A good deal of the time
F. Most of the time
G. All the time

Choose the one of the following statements which best tells how well you like your job.

A. I hate it.
B. I dislike it.
C. I don't like it.
D. I am indifferent to it.
E. I like it.
F. I am enthusiastic about it.
G. I love it.

Which one of the following best tells how you feel about changing your job?

A. I would quit this job at once if I could.
B. I would take almost any other job in which I could earn as much as I am earning now.
C. I would like to change both my job and my occupation.
D. I would like to exchange my present job for another one.
E. I am not eager to change my job, but I would do so if I could get a better job.
F. I cannot think of any jobs for which I would exchange.
G. I would not exchange my job for any other.

Which one of the following shows how you think you compare with other people?

A. No one dislikes his job more than I dislike mine.
B. I dislike my job much more than most people dislike theirs.
C. I dislike my job more than most people dislike theirs.
D. I like my job about as well as most people like theirs.
E. I like my job better than most people like theirs.
F. I like my job much better than most people like theirs.
G. No one likes his job better than I like mine.
APPENDIX 2

Raw Data

Participation in Decision Making

Mean = 17.962
Standard Error = 0.087
Standard Deviation = 3.885
Minimum = 5.000
Maximum = 51.000
Valid Cases = 1990
Missing Cases = 3

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### Job Involvement

Mean = 17.962  
Standard Error = 0.096  
Standard Deviation = 4.264  
Minimum = 1.000  
Maximum = 30.000  
Valid Cases = 1983  
Missing Cases = 10  

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Overall Job Satisfaction

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Standard Error = 0.074  
Standard Deviation = 3.281  
Minimum = 5.000  
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Valid Cases = 1986  
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