FREEDOM OF WORK-RELATED CHOICES AND WORK-ATTACHMENT: 
AN EXPLORATORY STUDY OF 
SECONDARY TEACHERS 

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ABSTRACT

The balance between freedom and constraint in the work situation lies at the core of interests in this study. The primary aim of the study is to examine among secondary school teachers in British Columbia the relationship between their attachment to work (i.e., the tendency to engage in their job consistently and continuously) and their personal assessments of freedom of choice concerning their (a) occupation, (b) working conditions, and (c) discretion in the work process. The study also deals with the impact that work-attachment has on the extent to which teachers (a) establish collegial friendship ties and (b) place special emphasis on student relations in instructional matters.

Data for the study are based on self-administered questionnaires from 224 secondary school teachers in British Columbia collected during the academic year 1972-73. Supplementary data are provided by written comments of respondents toward the questionnaire, follow-up conversations with selected respondents, and observations of the teachers themselves in the classroom, staff rooms, and staff meetings.

The data suggest that the relationship between any of the independent freedom-of-choice variables and work-attachment is generally contingent upon the teacher's age, sex, and size of school district in which he or she is located. Specifically, the findings indicate that (a) a high degree of freedom concerning choice of occupation is substantially related to work-attachment among young teachers (22-35 years) and among women teachers; (b) the original weak relationship between choice of
working conditions and work-attachment was not greatly altered under the same controls for age, sex, or school district size; and (c) the relationship between work-discretion and work-attachment was substantially strengthened among teachers located in large school districts. The data also show that women teachers and teachers in large school districts who indicate a high degree of work-attachment tend to establish stronger collegial friendship ties. The impact of work-attachment on the teacher's tendency to emphasize student relations in instructional matters is evident only in the case of the relatively older (36-65 years) teachers.

Both theoretical and practical implications of the findings are assessed, and suggestions for extended research are specified.
# TABLE OF CONTENTS

**ABSTRACT**

**LIST OF TABLES**

**ACKNOWLEDGEMENTS**

**CHAPTER**

I. INTRODUCTION

1. The Specific Problem
2. Why Study Teachers?
3. Research Traditions and Theoretical Continuities
   i. Teachers and the School Organization
   ii. Job-Attachment and Related Matters
   iii. Constraints and Freedom of Choice
   iv. Convergence of Research Traditions
4. The Variables: Subjective Aspects of Choice and Attachment
   i. Choice of Occupation
   ii. Choice of Working Conditions
   iii. Teachers' Discretion
   iv. Attachment to the Job
   v. The Two Faces of Attachment
5. Conclusion

References

(iv)
# II. METHODOLOGY

1. The Research Design
2. Population
3. Pretesting
4. Sample Size
5. Modes of Cooperation/Non-Cooperation
6. Field Visits
7. Techniques of Data Analysis
8. Index Construction

References

# III. ANALYSIS: FREEDOM OF WORK-RELATED CHOICES AND WORK-ATTACHMENT

1. Work-Related Choices and Work-Attachment
2. Work-Attachment, Teaching Orientations, and Friendship Items
3. Relative Effects of Variables on Work-Related Choices

References

# IV. EXTENSION OF ANALYSIS: CONTROLS FOR DISTRICT SIZE, AGE AND SEX

1. Choice of Occupation and Work-Attachment
2. Choice of Working Conditions and Work-Attachment
3. Discretion in Work and Work-Attachment
4. Interpretation

References
BIBLIOGRAPHY

APPENDICES

I-A. Guttman Scale 1: Items of Discretion 230
I-B. Guttman Scale 2: Items of Choice of Working Conditions 231
I-C. Guttman Scale 3: Items of Attachment 232
I-D. Smallest Space Analysis of Nine Items of Discretion 233

II. Questionnaire 234
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.1</td>
<td>Distribution of the Sample</td>
<td>51</td>
</tr>
<tr>
<td>II.2</td>
<td>Intercorrelation Matrix of Items of Discretion</td>
<td>61</td>
</tr>
<tr>
<td>II.3</td>
<td>Intercorrelation Matrix of Items of Working Conditions</td>
<td>63</td>
</tr>
<tr>
<td>II.4</td>
<td>Intercorrelation Matrix of Items of Attachment</td>
<td>69</td>
</tr>
<tr>
<td>III.1</td>
<td>Correlation Matrix for Independent Variables</td>
<td>78</td>
</tr>
<tr>
<td>III.2</td>
<td>Relationship Between Choice of Occupation, Choice of Working Conditions, Discretion On-the-Job and Work-Attachment</td>
<td>79</td>
</tr>
<tr>
<td>III.3</td>
<td>Relationship of Occupational Choice with Each of the Six Items of Attachment</td>
<td>81</td>
</tr>
<tr>
<td>III.4</td>
<td>Relationship Between Each of the Four Items of Choice of Working Conditions and the Summative Index of Attachment</td>
<td>82</td>
</tr>
<tr>
<td>III.5</td>
<td>Relationship of the Summative Index of Choice of Working Conditions with Each of the Six Items of Attachment</td>
<td>82</td>
</tr>
<tr>
<td>III.6</td>
<td>Relationship Between Each of the Nine Items of Discretion and the Summative Index of Attachment</td>
<td>83</td>
</tr>
<tr>
<td>III.7</td>
<td>Relationship Between the Summative Index of Discretion and Each of the Six Items of Attachment</td>
<td>83</td>
</tr>
<tr>
<td>III.8</td>
<td>Relationship Between Work-Attachment and Emphasis on Student Relations, Subject-Matter, and Discipline and Control</td>
<td>85</td>
</tr>
</tbody>
</table>
TABLE

III.9  Relationship Between Work-Attachment and Friendship with Teachers in the Same School and Other School  86

III.10 Relationship Between Discretion and Attachment Controlling for Choice of Occupation  89

III.11 Relationship Between Choice of Occupation and Attachment Controlling for Discretion  89

III.12 Relationship Between Discretion and Attachment Controlling for Choice of Working Conditions  91

III.13 Relationship Between Choice of Working Conditions and Attachment Controlling for Discretion  91

III.14 Summary of the Results of Relationships Between One Independent and a Dependent Variable while Controlling for Another Independent Variable  92

IV.1  Relationship Between Choice of Occupation and Work-Attachment Controlling for District Size, Age and Sex  99

IV.2  Relationship Between Choice of Working Conditions and Work-Attachment Controlling for District Size, Age and Sex  101

IV.3  Relationship Between Discretion in Work and Work-Attachment Controlling for District Size, Age and Sex  103

IV.4  Summary of Associations (Somers' D) Between Work-Related Choice Items and Work-Attachment when Controlling for District Size, Age and Sex  105

V.1  Relationship Between Work-Attachment and Friendship Items Controlling for District Size  131

(ix)
| V.2 | Relationship Between Work-Attachment and Friendship Items Controlling for Age | 133 |
| V.3 | Relationship Between Work-Attachment and Friendship Items Controlling for Sex | 134 |
| V.4 | Relationship Between Work-Attachment and the Teaching Orientations Controlling for District Size | 137 |
| V.5 | Relationship Between Work-Attachment and the Teaching Orientations Controlling for Age | 138 |
| V.6 | Relationship Between Work-Attachment and the Teaching Orientations Controlling for Sex | 140 |
| V.7 | Summary of Associations (Somers' D) Between Work-Attachment and Friendship Items and Work-Attachment and Teaching Orientations when Controlling for District Size, Age and Sex | 142 |
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Chapter I

INTRODUCTION

1. The Specific Problem

The study of the balance between freedom and constraint regarding behaviours in work-settings is an on-going concern with social scientists. They have studied the content of work and what it means to people. They have studied how both the content and meaning of work vary according to type of occupation, industry, and the position of people in the employing organization or in society at large. Their aim, implicit or explicit, has been to understand people and society more fully. Whatever its emphasis, their aim has been intensified by a value judgement that people "satisfied" with the quality of their work life are likely to be "happy" people.

Whether this happiness is localized to the work places or extends into areas of non-work life, and whether or not work life is segmented and kept separate from non-work life are questions constituting broad areas of investigation, areas that tell of possible linkages between work and non-work life.

Two interrelated questions, complementing the problems previously investigated, can be formulated: (a) What emotional bonds do people develop with their occupations?, and (b) Why do people engage in their occupations consistently and continuously? These questions direct the inquiry towards
(a) identifying the elements of attachment to the job, and
(b) assessing the extent to which attachment to the job is influenced
by freedom of choice concerning (i) occupation (ii) working conditions,
and (iii) modes of carrying out work or discretion in work.

This research problem is applied to secondary school
teachers, and it is guided by two fundamental questions:

1. To what extent do teachers feel that they experience a personal sense of freedom of choice in certain sectors of work?

2. Is their sense of freedom of choice related to their affective attachment to work?

For teachers, a personal sense of freedom of choice will be indicated to the extent that they say: (i) that they have a choice whether or not they work as teachers (the item stands for choice of occupation); (ii) whether or not they have a choice of certain working conditions; and (iii) whether or not they exercise discretion regarding the ways in which they do their job. (The specific indices of choice of working conditions and discretion in work are presented in Chapter II.)

Again, teachers' attachment to the job will be indicated to the extent that they say that: (i) the time they spend teaching is the most rewarding time they spend during a day; (ii) to them success in teaching is more important than success in something they do away from work - these two items stand for the "success" dimension of attachment to a job; (iii) they like to be identified as teachers; (iv) they would want one of their children to enter
teaching—these two items stand for the "identity" dimension of attachment to a job; (v) they would continue teaching even if they had money to stay away from it; and (vi) they would choose teaching if they were to choose an occupation over again—these two items stand for the "preference" dimension of attachment to a job. (The rationale for identifying these three dimensions of attachment is given in Chapter II.)

The forementioned research problem is exploratory because: (a) initially it seeks to clarify the notions of freedom of choice in certain sectors of work and attachment; and it (b) then seeks to discover whether or not freedom of choice in certain sectors of work is related to attachment. (A more detailed description of the exploratory nature of this research is provided later, Chapter II.)

Furthermore, the conceptualization of work-related choice variables lack support in the existing literature. This lack of cumulativeness of data on these variables makes them essentially exploratory. Later, however, these data will help in establishing priorities for further research.

2. Why Study Teachers?

There are many reasons for selecting teachers for the purposes of this research.

Firstly, this researcher is personally interested in education and the role of teachers at the secondary school level. Through this research he hoped to deepen his understanding of an educational system new to him.

Secondly, teachers as a group are becoming an influential population, especially in determining the broader goals of education, and in participating in the effort to achieve those goals. From this angle, the study is timely. Besides, the study fills a
research gap by providing an opportunity to gather much-needed data about teachers' freedom of choice in certain aspects of work, and attachment to the job.

Thirdly, the empirical findings on "voluntary behaviour" are limited to industrial settings, within which production technology, for one thing, is a compelling factor in determining the behaviour of workers. For this study, a different work-setting (e.g. schools, where teachers work with other human beings, and make adjustments on a day-to-day basis) is likely to be rewarding, because it will provide information on, and augment an understanding of, the varieties of voluntary behaviour.

Fourthly, many junior and secondary teachers view themselves as 'specialists' in particular subject-areas - therefore they have different expectations of their role. And they can justify these expectations by referring to their role in the public school system. In studying their discretion in work, that is, their role and its built-in expectations, the relationship between discretion and attachment to the job will come into sharper focus.

It should be clearly recognized, rather than dimly acknowledged, that teachers are a diverse group. Whenever they constitute the study population, their level of teaching needs to be made explicit for a proper appreciation of the findings. Studies done on teachers frequently fail to mention the level at which they teach. With few exceptions, teachers' careers are bound to the segment of the public school system for which they are trained. Keeping in mind
the level at which they teach is likely to enhance the credibility of the findings.

Lastly, the teacher population meets a "criterion of appropriateness" which a population must meet if it is chosen for an empirical study of freedom of choice concerning occupation, working conditions, and discretion in work.

Minimally, the population chosen needs to be engaged in an occupation in which opportunities for exercising discretion do exist; the personal skills which this population uses in performing its job remain potentially relevant to other jobs. For example, asking lumberjacks questions on amounts of discretion in work, and glassblowers questions on "freedom of occupational choice" would not be realistic.

The criterion of appropriateness mentioned above stipulates that the characteristics represented by a population and those particularized by the theoretical framework must match. Many other occupational groups could meet the requirements for this research. However, since the personal preferences of researchers often determine what they do, this research is by no means an exception to this general consideration.

3. Research Traditions and Theoretical Continuities

Placing the present research in a specific research tradition and within the associated theoretical continuities is a
stupendous task. A little of this task can be accomplished, but at the risk of an oversimplification. To be brief, this research is the result of a convergence between three different research traditions: (i) teachers and the school organization; (ii) job-attachment and related matters; and (iii) constraints and freedom of choice in work-settings. Each of these research traditions will be described briefly to indicate the problematic nature of some of the issues raised. Following that, the convergence between these research traditions and the relevance of that convergence to this study, will be made explicit.

(i) Teachers and the School Organization: This research tradition can be identified by its 'educational' content, some of which is specific to teachers. Regarding school organization, teachers, and teachers' "professionalism", this research tradition frequently raises three questions: (a) Is the behaviour of teachers in the organization of schools highly prescribed and codified? (b) Are there any personal choices open to teachers in their instructional activities? (c) Is there a congruence between the growing bureaucratic characteristics of schools and the personality needs of teachers, and is this congruence reflected in teachers' satisfaction with their job and the school structure?

These questions, in fact, stem from various theoretical perspectives, among which the following are conspicuous:* (1) The first one concerns the bureaucratization of the school organization, i.e., the school organization is characterized by standardization

* Specific references appear on p. 26, when teachers' discretion in work is discussed in some detail.
of procedures, rules and regulations; impersonal relationships between different levels of functionaries; control of employee behaviour through rules and regulations, and obedience to authority; and job specialization involving different responsibilities. The weight of opinion, therefore, is slanted in favour of administrative authority for the development and coordination of the school programmes. And conversely, and somewhat traditionally, teachers are shown to have been lacking in "power" and "autonomy", and may frequently be subject to "arbitrary" manipulation of conditions of work. (2) The second theoretical perspective concerns the exploration of various dimensions of the teachers' role. This perspective extends to the study of the boundaries of the teachers' zone of legitimate authority within the school organization. The weight of opinion, therefore, is slanted in favour of seeing teachers (a) enjoying a measure of power, because they are "insulated" from observability while in the classroom; (b) playing an effective role in the decision making process in the school, because they are "fortified" by professional norms, and (c) favouring an orientation to collegial authority rather than school bureaucracy, because the former is more in line with their professional image than the latter.

Since this theoretical perspective utilizes concepts, including their unmodified connotations from the literature on "professionalism", there is a need to propose a framework for study which (a) examines the assumptions implicitly accepted by others, (b) formulates the critical issue left unstated, and (c) augments the research efforts previously*

done. More will be said on this framework later.

(ii) **Job-Attachment and Related Matters:** Insofar as the present research is concerned with teachers' attachment to the job, it has theoretical affinities with research done on alienation, job satisfaction, job involvement, occupational involvement, work attachment, and job as a 'central life interest'. Each of these concepts or phrases is couched in terms of 'feeling states' of people about their jobs. A review of these research efforts indicates that they do not make any analytical distinction between a job as a process, an activity in which people engage continuously and consistently, and a job as a set of relationships. But an analytical distinction of this sort is necessary because one aspect of attachment can be represented by feelings for the job itself, and another aspect by concomitant satisfactions — those which are derivable from association with one's colleagues.

When both of these aspects of attachment are correlated, a deeper understanding of the phenomenon of attachment is reached than would be possible if only one aspect were studied.

Again, these research efforts recognize the sources of job satisfaction (e.g., affable colleagues, a clean place of work, salary, possibility of personal growth, 'open' climate of work organization, etc.) but they fail to point out that: (i) a source of satisfaction is qualitatively different from the satisfaction derivable from the activity in which one engages continuously and consistently, and (ii) a 'source' is only an indirect measure of
satisfaction; it might cloak the nature of satisfaction and deflect the focus of study. Moreover, recognizing a source of satisfaction and then deducing from it satisfaction with the job cannot be regarded as adequate; such a deduction might reveal more about the nature of the source of satisfaction than about satisfaction with the job.

This research stipulates that attachment to the job needs to be studied directly. But before doing that, attachment needs to be conceptualized in terms which are amenable to direct study. It follows, then, that the study of attachment becomes adequate to the extent (i) that it identifies a variable which immediately precedes attachment with the job, and (ii) that attachment itself is conceived in such a way that an analytical distinction between its elements can be maintained and demonstrated empirically. The case of the teachers' job serves to illustrate this mode of reasoning.

In this research, attachment has been conceived to have two faces: one standing for the teaching activity itself, and the other standing for certain concomitant satisfactions, i.e., those which teachers derive from their relations with other teachers (in the same school or elsewhere) and interpersonal relations with students. In studying attachment as directly as possible, analytical distinctions can be maintained between job as a process, and job as a set of relationships. Theoretically, if these two aspects of attachment are held together, then it is likely that
they will also hold together empirically; at least, this issue is resolvable through research.

(iii) **Constraints and Freedom of Choice:** The following are the details of the theoretical continuities of the variable 'freedom of choice'. The impetus for formulating the conception of freedom of choice in work-settings came from the studies of workers in industrial and other organizations. In the studies reviewed below, a mention of voluntary and necessary behaviour—and the adjustment between the two—appears in at least four ways. From the most general and theoretical to the empirical and specific, the manner in which the discussion of voluntary and necessary behaviour occurs can be summed up as follows:

(1) There is the long-standing and all-encompassing supposition of the social contract theorists that human society is the result of an agreement, or "contract", into which human beings entered freely. Through this agreement, they sought to put an end to the unbearable conditions of isolation, and threat of warfare, and consequently, sought an orderly life. Space does not allow a more detailed account of the ramifications of this conception of society and the freedom of the individuals to form this society. One ramification, however, is the assumption that the structure of all groups is the consequence of the aggregate of its separate individuals and that all social phenomena derive from the motivations of these knowing and feeling individuals.

The social contact theorists thought of voluntary action
as a value, a condition deemed desirable, a state of affairs to be achieved. In short, something which ought to exist. Their conception of voluntary action, though enshrined in symbolic form (i.e., philosophy, religion, and law), became the standard by which all institutions in the society were judged. Agencies like the family, the church, and economic and political institutions were to encourage and "demand" responsible individual action at all times. The business of society was not to be run arbitrarily by assigning social functions to birth strata or estates; only the responsible individual was deemed to be capable of handling unique, complex, and changing problems. This responsible individual could not be confined to economics; he was also required in politics, religion, and family life.

In other words, this broad conception of voluntary action was directed at insuring a measure of congruity between different institutional areas.

A critical comment on the pervasiveness of the conception of voluntary action formulated by the social contract theorists is in order here. To date, it is impossible to argue that a conception of voluntary action enshrined in symbolic form would unify or remain common to a population unless it became relevant to the actualities of experience. Times have changed since the social contract theorists wrote about voluntary actions; the story may be different today. For one thing, contemporary western societies have become complex, and concomitantly, functional
specialization is on the increase. The emergence of large scale bureaucratic and corporate enterprises has brought about enormous changes in conditions under which individuals behave. It may well be that voluntary behaviour — synonymous with choice behaviour — can best be understood, today, as an outcome of specific variables (economic, ethnic, educational, class, age, and sex). Voluntary actions have to be created continuously with reference to social circumstances, e.g., voting, protesting in a mob, and joining clubs for sports are voluntary behaviours which arise, flourish or 'decay' in terms of socio-cultural factors; these behaviours are not released by the human "breast".

By acknowledging the ideas of social contract theorists, and by examining their ideas in conjunction with other formulations, a working concept of voluntary behaviour can be developed for purposes of empirical research. The concept thus formulated will (a) be amenable to empirical research on a small scale, and (b) recognize the sources, limitations, and consequences of voluntary behaviour.

(2) Durkheim's conception of obligations, contracts, laws, duties and customs as constraints, Meissner's conception of the constraints of technology, and Hedley's application of the constraints of technology, as formulated by Meissner, to specific features of blue-collar workers' jobs, are all important, but are indirect sources of ideas on voluntary behaviour. If the word freedom refers to the ability of people to do something without constraints, then freedom and constraint connote the obverse of
each other.

The term constraint, both in its normative Durkheimian sense, and in the non-normative technological sense in which Meissner uses it, refers to conditions external to individuals which limit their behaviour in a variety of situations. The implications are obvious: that there are limits to individual voluntary behaviour; that these limits are societal and constitute the context in which individual choices about behaviour find expression; that any definition of constrained behaviour is formulated with reference to the possibilities of 'freedom' which can be envisaged; and, that these possibilities are larger and broader than the activities observed.

A constraint, then, is a type of relation between two sets. When variety in an observable set is smaller than variety in a possible set, a constraint is present. Conversely, freedom of choice is a relation between two sets; it exists to the extent that possibilities of alternative modes of action exist. It is theoretically possible (though in practice virtually impossible) to specify all the freedom one has in a given situation.

The subjective assessment of 'freedom of choice', which this research has implied, will later form the basis of an "operational specification" of choices concerning occupation, working conditions, and discretion in work.

(3) The conception of a hierarchy of needs developed by
Maslow, Argyris' application of this hierarchy to industrial work-settings, and the summary of the ideas of a whole school of industrial psychologists on human needs provided by Strauss under the title "personality-versus-organization hypothesis", together constitute another view of voluntary or choice behaviour. These writers assume that people have an "autonomy need" which does not find adequate expression in work-settings in which a significant portion of their lives is spent. Dependence, subordination, and submissiveness are experiences intrinsic to work settings and frustrating to those who work. While it is a truism to say that a work setting curtails to one degree or another free-floating expressions of human freedom, these writers fail to recognize that people who work adjust to the conditions under which they work. The need for autonomy can be satisfied only in relation to other individuals and a setting in which the possibilities for its expression exist. Assuming that people have an autonomy need and that possibilities of satisfying this need can be distributed to varying degrees, it would be hard to argue that frustration, apathy, and loss of identity are the likely outcomes of situations in which autonomy needs are not satisfied and possibilities for satisfying them are non-existent. In other words, the assumption has been made that people who work have a realistic assessment of what they can or cannot expect from their employing organizations. It may be conceded, however, that circumstances can arise in which a group of workers has a higher level of expectations than is being met by their employing organizations; but this may motivate them toward
collective and concerted action, to come to terms with their organizations, if they see accommodative structures. Although these ideas pertain to the realm of conjecture, it is conceivable that most working people go to their work places to complete certain tasks, a reason for which they are hired in the first place. Most workers, regardless of the type of organization in which they work, have a sense of balance between what they can and cannot get out of their work place. To the extent that this balance is in their favour, workers can be attached to their work. (This is an early mention of one of the hypotheses of this research, that concerning discretion, which is another expression for autonomy on the job. Discretion, a term with an organizational bias, is more appropriate than a bio-psychological bias, which the term autonomy seems to carry.)

(4) Dubin has provided a review of the works of industrial scientists who have been examining the various types of formal, non-formal, and technological constraints. In this review, he indicates how human actors, in their working lives, are caught up in necessary behaviours, and how non-work life is the realm in which choices for voluntary behaviour exist. Most people, therefore, live with a balance between necessary and voluntary behaviour. If the assertion is made, that voluntary behaviour is preferable, ideally in all situations, over necessary behaviour, whatever its mandate, one of the hypotheses of this research can be formulated: to the extent that people have the balance of freedom of choice and constraint concerning working life in their
favour, they are likely to be attached to their jobs.

Despite affinities with the research tradition reviewed above, the conception of 'freedom of choice' implied in this research, is broader than any conceptions of autonomy, or voluntary behaviour, or the obverse connotations of normative or technological constraints. It is worth emphasizing that when the phrase 'freedom of choice' prefaces certain job-related behaviours (i.e., choice of occupation, working conditions, and discretion in work), it becomes amenable to empirical research, however exploratory.

Before turning to a description of the variables of this research, it will be shown how the explicit concerns of this research stem from the convergence between the research traditions reviewed above.

(iv) Convergence of Research Traditions: Whether or not teachers are "professionals" is a question about which consensus does not exist, because the term profession differentiates between occupations along several dimensions, such as kind and amount of training and involvement in work, status, and working conditions. The presence of 'accommodative structures' between teachers as "semi-professionals" and their employing organizations, help to create a balance of freedom, power or authority for teachers. One such structure in British Columbia is the provincial association of teachers, which has played a major role in improving conditions for its members - all the way from salary increases through tenure protection, involvement in curriculum, textbooks, and source materials, to the development of a code of ethics.
What this code of ethics assumes implicitly, what the literature on professionalism repeats explicitly, is that, for members of a profession, "absorption in the work is not partial, but complete; it results in total personal involvement. The work life invades the after-work life, and the sharp demarcation between the work hours and the leisure hours disappears".

There is no evidence that codes of ethics have this compelling power; there are too many exceptions to make this statement useful. Whether one studies professionals, professionals "on-the-make", or any other occupational group, the question of involvement in work is an empirical question; it is a question that needs to be examined rather than accepted on face value. Hence, there exists a need for the study of teachers' attachment to the job.

Another concern of this research, discretion in work, stems from the uncritically accepted views by researchers concerning professionals or semi-professionals having "power", "authority", or "autonomy", not to mention the "autonomy need theory". Not always are these views unequivocally stated. Sometimes, a middle-of-the-road view on professional power-authority-autonomy is adopted; for example, by applying a professional-non-professional classification to the schools, Etzioni concludes:

Professional work here has less autonomy, that is, it is more controlled by those higher in ranks and less subject to the discretion of the professional than in full-fledged professional organizations, though it is still characterized by greater autonomy than blue- or white-collar workers.
As to the notions of autonomy, power, or authority, it may be that these notions are not appropriate, for reasons shown later, if the behaviours of teachers are examined. The concept of discretion is more appropriate than any other concept. How relevant the concept of discretion is to the teachers' work is a matter which will be discussed in detail later in the chapter. Suffice it to say here that discretion in work is exercised after a job has been chosen, a job which offers alternative modes of action during its normal performance. In point of time, occupational choice and choice or working conditions precede the exercise of discretion on the job. Thus, the present research attempts to reconstruct, with different tools, the sequence in which freedom of choice concerning occupation, working conditions, and discretion in work occurs.

Among the occupations which have been the subject of work satisfaction studies, factory and office work have predominated. At least three generalizations seem to emerge if studies appearing under the 'sociology of work' are reviewed: (i) that professional workers are the most satisfied, and semi-skilled and unskilled manual workers less so; (ii) that work in the so-called professions and the higher positions in various bureaucratic organizations provides an occasion for primary self-identification and self-commitment of the individual; and (iii) that jobs which involve dealing with people provide more satisfaction than those which do not. Not always are these generalizations based on adequate data, hence they are not immune from revision.

Though similar to assumptions appearing in the literature
on professionalism, these generalizations lack stringency, because they do not cover the semi-professions like teaching. The occupational categories represented in these generalizations (i.e., professions, skilled, semi- or unskilled occupations) do not adequately reflect the changes occurring in the occupational structure. As the emerging professions are very much part of the social scene, specific studies focusing on these emerging professions need to be undertaken to fill the information gap so obvious in these generalizations.

Teachers work with young people, but that does not automatically ensure their attachment to their jobs, just as their classification as semi-professionals does not indicate their self-identification with teaching. Whether or not teachers identify with the teaching role, and whether or not they are satisfied with their job, are questions which need to be examined with data.

Thus the foregoing reviews of studies appearing under the sociology of work and occupations, studies on professionalism including teaching, and studies on work satisfaction converge to form the present research problem.

4. The Variables: Subjective Aspects of Choice and Attachment

A simple assumption is made here: that individuals have a sense of freedom of choice of occupation, working conditions, and exercise discretion in work to the extent that they say so, and to the extent that they seek to express this sense of freedom whenever confronted with the opportunity.
An occupation can be viewed as a sphere of action containing opportunities and constraints. Individuals who have chosen an occupation are usually severely constrained; for instance, they cannot enter another occupation without loss of some kind (maybe salary or seniority or both). However, people are constrained to varying degrees. The subjective assessments of these constraints can be different. If they envisage possibilities of changing their occupations, and if they say that they can realize these possibilities, they could be described as having freedom of choice of occupation.

Their personal sense of freedom of choice concerning occupation does not exist in a vacuum; it has its societal sources and other limitations. The source of choice of occupation is the "right" of individuals to choose their work, and to specialize in narrowly defined tasks; however, a realistic assessment of personal capacities and of available opportunities, might put limits on the sense of freedom and the extent to which freedom can be realized in practice.

The sense of choice concerning working conditions, though tied to locations of employment, exists as a compromise between what is sought and what can be realized.

The source of discretion in work is the structure of the job, and the duties and privileges which the job carries. Those who accept a job then come under the constraining effects of different sources of choice behaviour. And those who have specific
occupations enjoy a differential sense of freedom of choice concerning occupations, working conditions, and discretion in work. It may be added that their personal sense of freedom about these job-related matters is reflexively tied to the sources, and the limitations (i.e., conditions external to individuals).

The principal significance of the assumptions and comments made above lies in the notion that freedom of choice is not solely to be explained by personality factors nor by objective conditions, but by the perceived relationship between the sources, the limitations, and the consequences of this freedom.

Each of the variables (i.e., choice of occupation, working conditions, and discretion in work and attachment to the job) needs further comment.

(i) Choice of Occupation: Whether teachers entered teaching accidentally, because of certain factors beyond their control, because of a spontaneous impulse, because of their deep interest in teaching, or because of rationally calculated means to some other ends, are matters which happened in the past; as such, these matters can be reconstructed only with techniques outside the domain of this research. The teachers' assessment of their sense of freedom of occupational choice at the present stage of their life is relevant to this research. In other words, this research seeks to elicit a psychological preference for another occupation. Since working teachers are involved, the question of occupational
choice is invoked "after-the-event", by asking them directly to indicate the amount of choice they think they have now. Phrasing the question this way can be categorized, methodologically, as "reason analysis", a research tool which interrogates the actors as to the intentions or motives of their actions. The success of this tool is limited, because: (a) actions are usually the result of many motives, and (b) many of these motives operate unconsciously, therefore, the actors may not verbalize them. Since choosing an occupation is a deliberate act, verbalizations of freedom to choose can be elicited adequately through structured questions.

Asking teachers directly to indicate the amount of choice they have now is a rather stringent measure because those who say they have a lot of choice or some choice show a degree of freedom from the constraints of their earlier choice. Their perceptions of choice derive from their belief in having adaptive capacities as persons who, with the help of some retraining, could take on another job. To say the least, they envisage possibilities of change. For them, their earlier choice is not restrictive of access to other opportunities; their earlier choice is not something which, once made, has become a dead end. Teachers with the response "lot of choice" or "some choice" will indicate a deeper sense of personal freedom; a teaching job for them is one form of being, but to be elsewhere could be as advantageous as being in teaching. Thus, their sense of freedom of occupational choice (a) reflects their feelings of adequacy, of independence, and of self-sufficiency -
if reference is made to the latent states of mind; and (b) produces attachment to the job, a job which serves as a vehicle - a socially respectable and desirable vehicle, for the realization of latent states of mind.

(ii) Choice of Working Conditions: The appointments of teachers are effected when available vacancies have been matched with the qualifications, the grades and the subject-matter specializations which teachers offer. It is on the basis of their specialization in certain subjects and grades that teachers seek jobs. Different districts have different needs for teachers. The range of subjects offered can differ slightly from one district to another. This will mean that there is a greater demand for teachers in some subjects than others, and that the demand for teachers in one district is different from that of another district. For teachers, the exercise of choice concerning working conditions is bound up with their assessment of the opportunities available for appointment - assuming they would want to teach the subjects at the grade-level in which they have specialized, assuming they would prefer to teach in a certain district, and assuming the opportunities for employment exist. By virtue of having received specialized and prolonged training, and by virtue of having certain levels of expectations, the practitioners in "professional" occupations, or those on-the-make, are likely to feel frustrated when faced with limited opportunities for jobs. Their sense of freedom is prone to become intense if they look on the one job they get as a temporary place which enables them to pursue their
interests rather than impede mobility. Perhaps they would willingly change their jobs and move to those positions where their skills would be best utilized.

In this research, the interest in working teachers requires the framing of questions on freedom of choice in working conditions in a manner that elicits responses in retrospect, like those on occupational choice. These questions will ask teachers directly to indicate the amount of choice they have with regard to which school district, which particular school, and which grades and subjects they teach. Asking them to indicate the amount of choice regarding subjects and grades is a relatively stringent measure, because having been appointed, they might have to accept the teaching of certain subjects not of their own specialization. The reasons for this are many: sometimes their teaching time has to be filled in; sometimes the principal wants them to teach a subject and they oblige; sometimes the appointment of a new teacher is not warranted but someone has to teach a subject that has been offered; sometimes the teachers themselves agree to teach subjects in which they have not specialized because they want the job badly. It follows, therefore, that teachers with a lot of choice concerning the subjects and grades which they teach will indicate a sense of freedom from the constraints of limited opportunities within the school and that teachers with a lot of choice concerning the school district and the school in which they teach will indicate a sense of freedom from the constraints of limited employment opportunities. Taken together, the responses to the four items (i.e., subjects,
grades, school districts, schools) will indicate that teachers' areas of specialization are marketable and needed, that they are employable and that they have some control over working conditions. (It is not surprising that the sense of freedom concerning working conditions turns out to be a complex area; this complexity is understandable though, because it pertains to subjects and grades, school districts and schools.)

Once they have obtained a job and started teaching, teachers have possibly synchronized their freedoms concerning the subjects and grades they teach, the school districts and the schools in which they teach. Since their job makes it possible for them to realize different freedoms simultaneously and since their job becomes a vehicle for the realization of feelings of adequacy, independence, and self-sufficiency, teachers' attachment to the job stands in concomitant relationships with their freedom of choice concerning working conditions. (It may be pointed out that a degree of overlap between freedom of choice concerning working conditions and occupation is inevitable because one may not exist entirely independent of the other.) The next variable, teachers' discretion in work, is given more attention chiefly because of two reasons: (a) it relates to the present job of the teachers; any question about it can be invoked directly; and (b) its conceptual underpinnings stem from the controversy on whether or not teachers are "professionals".

(iii) Teachers' Discretion: One consequence of the lack
of consensus on teachers' exact location on a continuum of professional 
non-professional classification is that their role becomes subject 
to conflicting expectations regarding the amount of control they 
have over their own work. As a group of workers aspiring to achieve 
full professional recognition, they are concerned with gaining 21 
more control over work, as some studies have shown, but as bureaucratic 
employees, they are expected to subscribe to the expectations of 
administrators and the general community. A large body of literature 
is available on the conflicting expectations of the teachers' role, 
about which one comment can be made, that is, that teachers want 
to have a larger and more effective control over the teaching processes 22 
and general conditions of work. The notable flexibility study done 
in B.C. four years ago brought out very clearly the number of 
"freedoms" which the B.C. teachers wanted to have over instructional 23 
matters. This study also reported that teachers expected to be 
consulted about building, remodelling, and designing of schools - matters which generally lie within the domain of the school boards. 
This latter aspect of teachers' expectations indicates the overall 
involvement they would like to have in teaching and in matters 
connected with the management of schools. Or it could be that, as 
a group, since they belong to a "profession on-the-make", they have 
a higher level of expectation of controlling their work than their 
counterparts in other organizations. However, the discrepancy 
existing between their expectations and the actual control they 
have over work, can be resolved when teachers, school boards,
and the department of education resolve it; this is a matter which lies outside the concerns of this research. It seems that insofar as professionals and semi-professionals continue to be employed by others, their freedom to control their work, wholly or in part, is by its nature a controversial issue.

It should be iterated that the critical issue which needs to be very clearly formulated, concerning teachers and their employing organizations, is the notion of "power" and control rather than freedom in the classroom or discretion in work. Incidentally, in the literature concerning teachers' professionalism, the issue is seldom, if ever, formulated in these terms. If power implies the ability to mobilize scarce resources, control definitions of various situations, and articulate educational goals and strategies, then this kind of power is vested in the government. Very few occupational groups, in fact hardly any, could qualify as professionals if this criterion of power were invoked. If discretion involves judgement about choices among means, and if discretion implies recognition of the inter-dependence of one's tasks with other tasks, then discretion is likely to be exercised within the framework of accepted goals and strategies. Generally, it would be true that jobs involving any narrow or broad definitions of "power", "authority", and "control", are usually arranged sequentially in career patterns; they allow new entrants to start at the bottom and move up when they have shown the capacity to handle small amounts of power, authority, and control. Moreover, the rigorous formal training or education associated
with such jobs discourages or weeds out those who are incapable.

Approaching the question from the perspective of employing organizations, it would appear likely that they have a complex structure of "inducement" for occupants of positions of power, and that they have elaborate criteria to evaluate the performance of job holders.

Teachers work in relatively "flat" organizations, with few hierarchical jobs. Most of them remain classroom teachers throughout their career. With the passage of time, their sphere of responsibility, and hence their accountability to senior authority remains stable. Thus, it can be seen that the application of notions of power, authority, and control to the teachers' job creates unwarranted complications rather than clarifying the nature of their job.

If, however, the simple notion of discretion in work - implying the use of independent judgement is applied, then it can be shown that this concept is quite appropriate to a description of the teachers' job.

To elaborate, teachers engage in several tasks involving direct teaching and instruction, as well as "non-teaching" tasks like the maintenance of records of attendance, paper-work, supervision of extra-curricular and social events, etc. The point of departure for this research is to identify those areas of teachers' work in which the "scope" for exercising discretion does exist and then to study those areas, through their self-reports, as to how much discretion they exercise in their work. Tangentially, any evidence of teachers' exercise of discretion will indicate how the actual performance of tasks helps to resolve the predicament of "semi-professional" employees for control over work in bureaucratic
settings.

Regarding discretion, the hypothesis of this research is that the exercise of discretion in work is likely to be associated with attachment to the job. The rationale for the hypothesis is that the exercise of discretion in work for teachers means an acknowledgement of their skills, expertise, and competencies. This acknowledgement is gratifying to them; it also strengthens their self-image, sense of adequacy, and self-importance; these are feelings which they experience as a result of their exercise of discretion in work, and which dispose them to develop affective attachment to their jobs.

To clarify, teachers' attachment to the job is likely to reflect back on their self-image, because it is considered the mark of a profession that its practitioners be "committed" to their work. It follows, therefore, that attachment to the job, once developed, has the likelihood of becoming reinforced.

Support for the hypothesis on discretion can be obtained by asking the teachers directly to indicate the amount of choice they have over various instructional matters. The sum of these choices can be regarded as an index of their discretion in work. The important task is to identify the activities in which teachers engage so that out of those activities, indicators of discretion in work can be chosen.

To turn to one source of activities in which teachers
engage, a description of the teachers' duties is provided in the Public Schools Act 1973. This Act provides a normative basis of what teachers are required to do while at work. Besides, it provides guidelines to public education and administration. An examination of teachers' responsibilities in this Act indicates that in their day-to-day performances, teachers engage in various matters concerning curriculum, methods of instruction, maintenance of discipline, management and ordering of equipment, procurement of textbooks, guidance of students in different subject areas, working out of evaluations of students, and maintenance of attendance records; they participate in staff meetings, and they manage extra-curricular activities. Any ready-made categorization of teachers' activities is likely to be unrealistic, because deviations in these duties exist from one district to the next. However, there are certain "core" activities in which all teachers engage, and these core activities can be made the basis of an index of their discretion in work.

As a strategy of measurement of discretion in work, teachers can be asked directly to indicate how much choice they exercise in curriculum modification, in teaching techniques, in the handling of discipline matters, in the procurement of supplies and equipment, and in recommending books to students. In different terms, teachers can be asked how much influence they have in policy making in the school, to what extent they determine the amount of paper-work which they do, how much time they spend on different subject-areas, and the modifications they make in the evaluation standards of students. This would be a selected list of teachers' activities, but it is general enough to be applicable to different subject-areas.
which teachers might offer in one or many schools. It is only with the construction of a general inventory of teachers' activities that any variations in their discretion in work can be taken into account and then subjected to study.

(iv) Attachment to the Job: 'Attachment' is an emotional bond reflected through a sense of 'identification' with the job, 'preference' for the same job, and regarding being successful in the job as something 'important'. To be succinct, attachment is mediated by a blend of personal ideas and values, self-conceptions, prestige of one's job and numerous other variables. The variables appearing above as 'choice of occupation', 'choice of working conditions', and 'discretion in work' are truncated from an infinite variety of variables. Since these variables are directly related to the job, and since these variables precede job attachment in an immediate (temporal) sense, they are relevant and eligible independent variables. In choosing these independent variables, the assertion is a simple one: namely, that if attachment to the job is under study, then it should be studied through variables which are related directly to the job. In hypothesizing that each of the 'choice' variables is positively associated with attachment, the present research intends to keep the temporal order of variables in line before it examines relationships between these variables.

(v) The Two Faces of Attachment: The three dimensions of attachment - identity, preference, and success - represent individual
feelings for the job. For teachers, actual teaching is more than just a job; it is also a set of relationships, those between teachers and students, and those between teachers themselves. In an analytical sense, teachers may express their attachment to the teaching job as well as show some feeling for their relationship with students and colleagues. Put in the words of some teachers: "I like my job, and the kids in this school, and I like the teachers around. They are a nice group." (Expressions like these were collected by the researcher during the pretesting of the questionnaire.) There is then some justification in thinking of attachment as having two faces: one represented by individual feelings for the job, and the other face represented by concomitant satisfactions which teachers derive from working with students and colleagues.

There are two hypotheses which may be developed empirically to find out whether or not attachment has two faces: (1) one hypothesis is that teachers attached to teaching are more likely to be student-oriented, i.e., they would place a strong emphasis on interpersonal relations with students; and (2) the other hypothesis is that teachers who are attached to teaching are more likely to have personal friends among other teachers. (The phrase 'other teachers' may stand for teachers in the same school or in schools elsewhere.) The rationale for each of these hypotheses is given below.
Emphasis on Student Relations: Concerning hypothesis one, it may be stated that there are three sets of expectations which teachers confront: (i) those held by students, and parents; (ii) those held by administrators, especially the principal; and (iii) those listed in the "code of ethics" adopted by teachers. Information about the nature of these expectations as it has emerged in studies on the outstanding characteristics of teachers suggests the following: that the teacher is enthusiastic about working with students; that he is sensitive to the feelings of students; that he listens to their problems; that he views his students as a major source of satisfaction in teaching, and that he emphasizes feelings of affection for them. These characteristics by themselves are not worth mentioning except for two reasons: (a) there is a stable set of expectations of students, and parents, principals and teachers themselves, and (b) the focus of these expectations is the teachers' relation with students.

In addition, the code of ethics adopted by the B.C. Teachers Federation exhorts its members, inter alia, to act toward pupils with respect and dignity, and recognize that the student-teacher relationship is a privileged one; in this again, the focus is on teachers' relations with students.

It is justifiable to say that these sets of expectations are quite compelling for teachers, and it can be assumed that teachers are aware of the expectations which others hold of them.
However, it would be difficult to argue about the intensity of awareness, or the degree to which these expectations have been internalized by teachers. But it seems to follow that teachers are likely to be sensitive to their reputation among students, parents, school principals, and their colleagues in the same school and elsewhere; that they will work to maintain that reputation, and that they will be concerned with the prestige with which their occupation is regarded by others. To continue, once teachers have established their reputation, they will continuously try to maintain it, directly through appropriate behaviours, and indirectly, by avoiding those behaviours which are likely to affect their reputation adversely.

Turning to the rationale, to the extent that teachers emphasize student relations in their teaching practices, they are living up to and/or reinforcing their reputation as teachers—that is, they are maintaining their self-image and the image of their profession. Contacts with students make the realization of personal and professional images possible; therefore, it is important to study student-teacher contacts. In this behalf, the implication may be articulated: the prestige of the teaching occupation is likely to be determined by the manner in which teachers maintain their reputation and their self-image.

A complementary condition to this rationale emerging from the discussion on perceived teaching styles may also be mentioned here. The general tone of the discussion on teaching styles is as follows: a classroom is a setting in which incumbents
of two positions, teachers and pupils, are engaged in a continuous transactional process. This process has its own formal and informal procedures which relate in practice to the educational tasks, to the pattern of relationships, and to the problems of organization and control of the environment.

One area of widespread concern to teachers is described as "content-orientation", which, in a theoretical sense implies whether, in teaching, emphasis is placed on subject-matter, interpersonal relationships, or discipline and control. If teachers place emphasis primarily on subject-matter, it is described as a "traditional orientation"; if they place emphasis on interpersonal relationships, it is described as a "progressive orientation"; and if they place emphasis on discipline and control, it is described as an "authoritarian orientation".

Rather than question the boundaries between these orientations too rigorously, it may be assumed that teachers, during their training, get exposed to all the three. Further, it may be assumed that teachers are then faced with a choice about whether to accept the validity of one orientation over the others; or that they may through their own ingenuity combine elements of each to suit their precise requirements when faced with the realities of classrooms; or that the "law of the situation" may coerce a particular teacher or groups of teachers to adhere to one orientation and ignore the others.
The discussion of teaching styles, as it occurs in the literature, fails to recognize one important point: that the grade level and subjects taught, and the size of the class are all determinants of the approach the teacher activates. For example, music teachers need to place a certain amount of emphasis on the students' assimilation of subject-matter, and on discipline and control, yet it might not be possible to ignore interpersonal relations if the classes are small. The degree of emphasis which a particular teacher places on one or another orientation is likely to be a personal choice, or perhaps a situational necessity. As most teachers teach more than one subject and grade, their students differ noticeably from one class to the next. Any conceivable boundaries between these orientations, on theoretical grounds, are likely to get blurred in practice as teachers adapt to various classes. In an empirical sense, a distinction may emerge if teachers indicate the relative emphasis they place on each; for instance, a stronger emphasis placed on interpersonal relations with students may be consistent with a low/weak emphasis on discipline and control, and subject-matter. Other possible permutations will not be mentioned here.

By extending the inquiry on these lines, this research returns to the earlier concern, that of teachers' emphasis on student relations. But in doing so, a contribution to the scanty information on classroom teaching styles can be made.
The rationale for the second hypothesis, that teachers who are attached to teaching are more likely to enter into personal friendships with other teachers, is as follows:

Friendship Among Teachers: It is a fairly tenable assumption that "professionals" are sensitive to their reputation among colleagues. Moreover, they are dependent on their colleagues for esteem. Assuming that teachers as a group are not an exception to this assumption about professionals, it can be shown that they are subject to some collegial support and control. For instance, in B.C., the accusations against teachers for breaches of the code of ethics are examined by their professional organization. (This code of ethics, as a matter of fact, expects the teachers to review and assess with their colleagues the practices they employ in discharging their duties, that is, service to their students. The fact that such an expectation has been particularized in the code of ethics constitutes a "horizontal" constraint.) A study of collegial interaction among teachers is, therefore, a significant way of examining the assumption about "professionals".

The question of collegial interaction (or friendships) among teachers can be approached by asking teachers directly to indicate the friendships they have formed with other teachers in the same school and elsewhere. Generally, when friendship is intra-occupational, the underlying basis for friendship is the
liking for one's occupation, a liking which acts as an incentive to associate with those with whom one has something in common. At the individual level, interacting with colleagues is a matter in which personal choice plays a great part, but the basis of interaction may be both instrumental and affective. It is instrumental in part because it helps to belong to a group of significant others whose cooperation can be elicited at times of need (salary negotiations, for one thing, which are done locally in a school district); and it is affective in part because the recognition which one receives from one's colleagues is gratifying, and supportive of one's self-image. In the case of teachers, two compelling elements of the school - students and colleagues - help to provide the "routes" through which self-image is supported; interaction between teachers and students, and interaction between teachers themselves are the touch-stones.

In addition, the commonality of interests among teachers can be regarded as an interpersonal parallel of teachers' liking for their job. Empirically, this liking should emerge in teachers' friendships with colleagues in the same school as well as elsewhere. A personal friend by definition would be another teacher with whom one discusses personal matters not related to the work of the school. At least one personal friend may be taken as sufficient evidence of the presence of 'some' or 'weak' friendship. The same criterion can be used to designate the presence of friendship among teachers in two or more different schools. It is necessary to
include 'different' schools because, owing to highly personal reasons, teachers may not form friendships but may maintain working relations with colleagues in the same school. Formation of friendships between teachers in different schools then becomes the 'extension' of intra-occupational interaction; it becomes a second measure of collegial interaction; it reinforces the indicators of friendship among teachers in the same school; therefore, its importance in this research should not remain un-noticed.

5. Conclusion

In sum, it is not possible to specify all the freedoms that teachers enjoy, but through their self-reports, at least those freedoms can be studied which pertain to choice of occupation, working conditions, and discretion in work.

There are four working hypotheses which have been formulated and presented in the preceding pages. These hypotheses are:

1. Choice of occupation is positively associated with attachment to the job.

2. Choice of working conditions is positively associated with attachment to the job.

3. Discretion in work is positively associated with attachment to the job.

4. Teachers attached to the job are:
   (a) more likely to emphasize interpersonal relations with students; and
   (b) more likely to enter into personal friendships with teachers in the same school as well as teachers in different schools.
A diagrammatic presentation for visual simplicity, of the working hypotheses appears on the following page. In this diagram, the independent and the dependent variables have been identified separately.

In the next chapter, the methodology used in this research has been presented, and in the chapter following that, the analysis of the relations between the variables has been presented.
Diagrammatic Presentation of the Working Hypotheses

Set 1:

1. Choice of Occupation

2. Choice of Working Conditions → Attachment to the Job

3. Discretion in Work

Set 2:

4. Attachment to the Job

Emphasis on Student Relations

Friendship with Colleagues

The unidirectedness of the arrows is just a rule-of-thumb indicating that the independent variable "leads to", "produces", or is "associated with" the dependent variable.
REFERENCES


10. R. Hedley, *op. cit.*

11. The phrase hierarchy of needs implies that a higher need provides motivation only when a lower one has been satisfied. From low to a high order, these needs are: physiological needs, safety, love, esteem needs, need for self-actualization, cognitive needs, and aesthetic needs. Maslow's theory may be seen in L.J. Biscoff, *Interpreting Personality Theories*, New York: Harper and Row, 1964.


Chapter II

METHODOLOGY

1. The Research Design

The emphasis in this exploratory\(^1\) study is essentially on gaining familiarity with teachers' sense of work-related freedoms and work-attachment. Since the research originated with the exploratory rationale in mind, a certain degree of flexibility was built into it, allowing for the adaptation of data collection and analysis procedures to the research purpose.

The exploratory rationale of this research is based on the following two reasons. First, as the freedom of choice variables and the statements of relationships between these variables are peculiar to this research, the ideas and insights gained concerning these variables can be used in a subsequent, more highly structured study. Secondly, as an argument has been made concerning the two faces of attachment, this study attempts to explore whether or not that argument can be supported with data.

(45)
In formulating the research problem and in developing working hypotheses, the present research seeks to provide information that will be helpful in formulating more precise hypotheses and a more definitive investigation in an area where hypotheses have not been fully formulated as yet. Such a focus in the research effort requires certain changes in the basic research procedures, changes which are necessary in order to provide data relevant to the emerging hypotheses and the general argument of this research.

2. Population

From the beginning, it seemed rather futile to think of having a representative sample from among 75 school districts, 232 secondary schools (grade VIII through XII) and more than nine thousand teachers in the province. First, the resources to plan that kind of research were not available. Secondly, an earlier letter addressed to the school superintendents asking for information on the schools with a view to conducting a survey, did not bring much appreciable encouragement. The letters were sent out to fifty-four school superintendents in charge of 75 districts. Out of these, three replied in an affirmative tone, six refused; one left it up to the discretion of the school principals; and about twenty-two just supplied the list of schools without mentioning anything about the possibility of a survey in their districts.
Of necessity, the decision was made to select a sample which could be described as a sample of convenience, a judgemental sample, that is, those schools were included in the survey that showed a willingness to participate in the survey. Since the study was exploratory, this sample was thought to be adequate.

3. Pretesting

Of the three initially approving district, two within easy reach were chosen and later approached for pretesting the questionnaire. A letter requesting the cooperation of five teachers was sent to each of the principals in these districts. They were also contacted on the phone. The selection of teachers was left to their discretion. However, the principals consenting to cooperate circulated the request letter among the staff, and the names of those who volunteered to cooperate, were obtained. Most often the questionnaires were delivered to the teachers; in cases where teachers were busy, they were left with the office secretary, and sometimes they were mailed with self-addressed stamped envelopes. A total of about thirty questionnaires were collected in this manner.

The other school district was approached through the good offices of the Director, Faculty of Education who happens to know a "research-oriented" director of secondary instruction. This researcher met with the secondary administrators in their official meeting with the director himself.
About fifteen minutes were allowed for introducing the research project. As only about twenty-five questionnaires were needed, two of the principals present volunteered to distribute these questionnaires to their staff. About twenty questionnaires were collected from this district.

In all, about 48 pretested questionnaires were analyzed before finalizing the questionnaire used in this study.

4. Sample Size

Galtung suggests that a researcher has to answer three questions before he decides on his sample size. (1) How many variables does he want to analyze simultaneously? (2) What is the minimum number of values that he wants to use per variable? (3) Given his analytical techniques, what is the minimum average per cell that he needs?

A minimum of two variables were to be simultaneously analyzed. A minimum of two values per variable were conceived. As both the independent and dependent variables happened to be of an ordinal nature, at least three values per variable were contemplated; the results of the pretesting had made this possible. Both of these considerations made available two options: (1) Two variables with one control, with two values each would make the number of cells in the two marginal tables eight. (2) If three values for both the independent and dependent variables, and only
two for the control variable are chosen, the number of cells in the two marginal tables would increase to eighteen.

There is no rational answer to the third question as to the number of cases on the average in each cell. It should be preferably more than twenty for the tendencies to come out clearly. Deciding in favour of twenty cases per cell, the sample size in the case of option 1 was 160 cases \((20 \times 8 = 160)\). For option 2, the sample size increases to 360 cases \((20 \times 18 = 360)\). As this research was placed in the category of a survey research, however exploratory, the decision was made to have the larger sample, that is, 360 cases.

In choosing the school districts, at least three considerations had to be kept in mind: (1) that the district be within travelling capacity; (2) that it should have a large number of schools; and (3) that it showed promise of cooperation.

To start with, six district were chosen. One of these was approached through its director of secondary instruction, who at one time was the instructor of this researcher for a course on the administration of secondary schools. He was helpful in obtaining the permission of the district superintendent for the research.

This district had nine schools. A letter soliciting cooperation was sent to each principal in the
district. Of the nine principals contacted, seven refused and two agreed.

A second district within easy access had three schools. A letter was sent to each of these schools followed by a telephone contact. All the three schools refused.

A third district was within a 35-mile radius with two schools. Both were contacted through letters. Only one school cooperated, but the number of teachers in the school turned out to be small.

Two other district were within a radius of about seventy-five miles with five secondary schools each. All the ten principals in both the districts were contacted by letter. Two principals from each of the districts agreed. Later, another school was added to the list through good luck. The researcher was visiting with a teacher friend when the school principal arrived. After introductions, the principal showed interest in the research if it was not too late to be involved. He later provided the researcher with an opportunity to address the staff meeting. The teachers who were present agreed to participate in the research.

The last district contacted was the one in which pretesting had been done earlier. Excluding the two schools that had already participated in the pretesting of the questionnaire, the remaining five were approached through letters and reminders of the earlier meeting with
the principals. Of these five schools, only two agreed.

It took the researcher nearly four months of correspondence, field visits, and contact making to collect the following number of completed questionnaires:

Table 11.1. Distribution of the Sample

<table>
<thead>
<tr>
<th>District</th>
<th>No. of Schools</th>
<th>Schools Cooperating</th>
<th>% Response per School</th>
<th>Questionnaires Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>2</td>
<td>74/49</td>
<td>53</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>12</td>
<td>78/55</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>3</td>
<td>77/72/76</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>2</td>
<td>48/65</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1</td>
<td>64</td>
<td>7</td>
</tr>
</tbody>
</table>

224

5. Modes of Cooperation/Non-Cooperation

First, there were principals to whom the idea of such a research was agreeable. They were willing to allow 10-15 minutes in the next staff meeting for presentation of the research project. And if the staff agreed to participate in the survey, it was all right with them. This was possible in a few instances as the staff meetings and the time of the research happened to coincide.

Secondly, there were principals who took the initiative of posting the request letter in the staff room
along with the copy of the questionnaire, always enclosed with the letter. They would put up a note for the staff asking them if they would participate. The staff decision was then communicated to this researcher.

Thirdly, there were principals who sounded their staff in the staff meeting that happened to be coincidental with the research and the request letter. If the staff agreed, the decision was communicated to the researcher.

There were principals who decided not to cooperate. Among these there were those who never replied to any request letters; others simply refused to allow the initiation of a research in their schools. Those who explicitly refused gave the following answers: The time is not appropriate; teachers are busy; we usually take a hard line with researchers as there are too many requests; we have some problems, why not pay twenty dollars each for the questionnaire if it is so important to have it filled; staff are tired of the M.A and Ph.D students' requests.

6. Field visits

Before entering the pretesting stage, the researcher had made it a point to visit as many schools as possible in order to talk to teachers, school principals, even students, and thus become familiar with the public schools in operation. These visits were arranged either through one or another friend or instructor on the Faculty
of Education at the University of British Columbia.

Later, when the initial cooperation had been elicited, the questionnaires were sometimes mailed, sometimes left in the teachers' mail boxes, and at other times, the questionnaires were personally distributed. Whatever form the distribution of the questionnaires took, the researcher would personally visit the participating schools and he would spend as much time there as he could manage. This way he was able to talk to teachers personally and answer their questions on the questionnaire. The meetings with teachers would take place mostly during the spare-times when the teachers were not teaching. The minimum time spent in a school was one-half of a working day, and the maximum was two days, depending upon the size of the school and the number of teachers in the school. The researcher did not visit three of the ten schools included in the sample because one school had only seven participating teachers and a visit was not through to be productive. And two of the schools were too far away to be visited again; already the pretesting had been done in the districts in which these schools were located.

After well over four months of effort at data collection a decision had to be made whether to continue to collect the desired number of questionnaires or stop to look at those that had already been collected. Time and effort, and the money involved in travelling within a radius of
three hundred miles from the centre of Vancouver, coupled with the high non-cooperation rate were factors strong enough to make the researcher reconsider his earlier decision as to the number of questionnaires needed for analysis. At the time of reconsideration, the number of cases collected happened to be 224, a figure which lay between the two options available at the time the sample was chosen. The number of cases collected, 224, was between 160 and 360, the two figures considered earlier. Consequently, the techniques of data analysis, described below were matched to the smallness of the sample.

7. Techniques of Data Analysis

The mode of data presentation is tabular; it is appreciable because of its simplicity and direct visual appeal. When the tables are set up to examine statements of relationships between variables, the data are presented in bivariate percentage distributions. The variables involved (choice of occupation, working conditions, discretion on the job, and work-attachment) are ordinal, meaning that the values assigned to these variables can be arranged in increasing or decreasing order, but the numeric values assigned to the cases do not correspond to a cardinal metric. The relationship implied in the hypotheses is asymmetric, meaning that the independent variable affects the dependent variable and not the other way round. To test for the relationship between the
independent and dependent variables, a statistical measure called Somers' D was chosen, as this measure is appropriate for both ordinal variables and asymmetric relationships. It should be noted that Somers' D will be used whenever the association between variables is examined.

\[
\text{Somers' D} = \frac{2(P - Q)}{N^2 - \frac{1}{2} \sum jCj^2} = \frac{P - Q}{\frac{1}{2} (N^2 - \frac{1}{2} \sum jCj^2)}
\]

where

\( P \) = all pairs in which the order on one variable is the same as the order on the other.

\( Q \) = all pairs in which the order on one variable is the opposite of the other.

\( jCj \) = the count of each column in the table

\( N \) = the number of cases.
The analysis also involves index construction for the multiple items which were used variously for the independent and dependent variables. As several items were involved in any single index, it was necessary to find out if these items were intercorrelated. Provided the items are ordinal and provided the number of categories are few, Kendall's tau is an appropriate measure to determine whether or not the items can be combined in an index. 4

\[
\tau = \frac{S}{\frac{1}{2} N (N - 1)}
\]

Where

\[S = \text{amount of agreement between two sets of ordinal ranking}\]

\[N = \text{number of cases.}\]

(The computational formula has a correction factor for tied ranks.)
8. **Index Construction**

One of the independent variables, discretion on the job, consists of nine items. Each of these items represents a teacher behaviour involving choice, and when combined with others, constitutes a measure of teachers' discretion over work.

**Independent Variable: Discretion on the Job**

<table>
<thead>
<tr>
<th>Items</th>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Much Choice</td>
</tr>
<tr>
<td></td>
<td>+1</td>
</tr>
</tbody>
</table>

1. Experiment with new methods of instruction.

2. Handle discipline problems according to students involved.

3. Recommend books in addition to those prescribed.

4. Influence school policies about instruction in the grades I teach.

5. Determine the amount of paper work involved in doing my work as a classroom teacher.

6. Vary the amount of time spent on different subject-areas with regard to students' state of learning.

7. Order supplies and equipment needed for instruction.

8. Modify curriculum content with regard to student abilities.

9. Modify achievement standards to correspond with student abilities.
Individual Score is \( \frac{\sum x_i}{n} \), ranging from -1.00 to 1.00, where \( x_i \) is the score on each item, the possible score being (1, 0, -1) and \( n \) is the number of items.

Example: \(\frac{(\text{No } +) + (\text{No } 0) + (\text{No } -)}{\text{No of Items}} = \frac{(+6) + (1 0) + (-2)}{9}\)

\[ \frac{4}{9} = .44 \]

The score calculated is the arithmetic mean, which combines the responses to single items. Depending upon the excess of positive responses over the negative ones, or vice versa, the possible scores are: + or -.11, .22, .33, .44, .55, .66, .77, .88, and 1.00.

In a 3 x 3 cross-tabulation, the following three values can be formed:

No Choice = -.11 to -1.00 and .00
Some Choice = +.11 to +.44
Much Choice = +.55 to 1.00

The above formula makes it possible to summarize the responses of individuals to a series of items. The underlying assumption is that various items, even though different qualitatively, can be combined into an index "if they are stripped of their differences and reduced to their common denominator." As these items enter the formula of index formation, the particular elements distinguishing them are lost. Thus by abstracting the properties common to all
items, different items can be put together in an index. By the procedure followed, each of the items is given equal weight, and when combined with others, forms an "index" rather than a direct measure of discretion.

As nine items were involved, to attain a certain degree of sophistication in measurement, an attempt was made to secure a unidimensional scale, that is, a scale which permits the ranking or ordering of respondents according to their responses on the several items involved. By subjecting the items to several trials of Guttman scalogram analysis, as available in the SPSS computer programme, the highest coefficient of reproducibility obtained was .81 and the highest coefficient of scalability was .45 with six items: 4, 6, 9, 8, 1, and 2 entering the scale from the most difficult to the least difficult items. (See Appendix I - A;) Ideally, a scale should have a coefficient of reproducibility of over .90 and of scalability of well over .60.

Again, to test if more than one dimension in these items were involved, a different strategy, SSA (Smallest Space Analysis) was used, the results of which have been presented in Appendix I-D. This technique is useful in working out the fewest number of dimensions involved in a fairly large number of items/variables. The analysis showed that items 1, 9, and 4 clustered, items 5 and 7 clustered, and items 3 and 8 clustered in a two-dimension diagram.
But the coefficient of alienation was .11, which was high considering that only nine items were analyzed in a two-dimension space. From this result, the conclusion that more than one dimension is involved, could not be drawn.

In order to keep the level of measurement simple, and to find out if the nine items could be combined into an index, an intercorrelation matrix was developed. Developing a matrix is a useful strategy, even though it does not indicate any advantage over the Guttman scalogram analysis or the SSA. This matrix, however, indicates that with the exception of item 3 which relates negatively with item 5, the relative magnitude of the coefficients, among themselves, does not vary considerably; hence the results are credible. Most correlation coefficients range between low and moderate association, therefore it is justified to say that none of the items is any stronger than the others, and that these nine items can be combined into an index.

The items on discretion, formulated with reference to the teachers' duties outlined in The Public Schools Act, 1973, were put through the pretest, and before that, were shown to some teachers and directors of secondary instruction for critical comments. Any suggestions received were incorporated into the wording of the items and into the indices for these items. There is then some justification in regarding the items of the index as dependable.
TABLE II.2: Intercorrelation Matrix of Items on Discretion

Kendall's Tau*
(Rank-order Correlation Coefficient)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.25</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.22</td>
<td>.20</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.14</td>
<td>.06</td>
<td></td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.12</td>
<td>.17</td>
<td>.16</td>
<td>.15</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.10</td>
<td>.15</td>
<td>.21</td>
<td>.32</td>
<td>.12</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.31</td>
<td>.21</td>
<td>.33</td>
<td>.21</td>
<td>.04</td>
<td>.27</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.32</td>
<td>.15</td>
<td>.15</td>
<td>.22</td>
<td>.12</td>
<td>.22</td>
<td>.27</td>
<td>.37</td>
<td></td>
</tr>
</tbody>
</table>

* In order to determine whether or not a set of items/variables can be combined into an index, Kendall's tau is an appropriate measure of correlation when (a) the items are ordinal, and (b) the number of categories few and/or the number of ties large.

As Kendall's tau varies between -1.0 and +1.0, the strength of the correlation can be determined by the following conventions:  

(- or +) .01 to .09, negligible correlation;  
.10 to .29, low correlation;  
.30 to .49, moderate correlation;  
.50 to .69, substantial correlation; and  
.70 or higher, strong correlation.
Later in the analysis, the initially formulated summary scores will be used wherever relationships between variables are tested.

For the independent variable, choice of occupation, only one item was used, and it had three response categories.

<table>
<thead>
<tr>
<th>Item</th>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Much</td>
</tr>
<tr>
<td></td>
<td>Choice</td>
</tr>
</tbody>
</table>

Whether or not I work as a teacher.

For purposes of cross tabulation, all three categories were kept wherever a $3 \times 3$ table needed to be constructed.

For the second independent variable, choice of working conditions, the following four items were used.

**Independent Variable: Choice of Working Conditions**

<table>
<thead>
<tr>
<th>Items</th>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Much</td>
</tr>
<tr>
<td></td>
<td>Choice</td>
</tr>
<tr>
<td></td>
<td>+1</td>
</tr>
</tbody>
</table>

1. Which school district I teach in.

2. Which school I teach in a particular school district.

3. Which grade levels I teach.


As before, each of the items has been assigned three response categories, and each of the response categories
has been assigned a positive, a negative, or a neutral sign. The signs correspond to the meaning implied in the items on choice of working conditions: much choice is 1, some choice is 0, and no choice is -1. Thus the index varies between 1 and -1, with a zero point standing for a balance between the positive and negative extremes. Using the previous formula, and depending upon the excess of positive responses over the negative ones, or vice versa, the possible scores are: + or - .25, .50, .75, and 1.00. In a 3 x 3 format for cross-tabulation, the following three values may be formed:

No Choice = -.25 to -1.00 and .00
Some Choice = +.25
Much Choice = +.50 to 1.00

To test whether or not these indices measure a single dimension, the following inter-item correlation matrix is helpful.

TABLE II.3

Intercorrelation Matrix of Items on Choice of Working Conditions

Kendall's tau

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.14</td>
<td>.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.16</td>
<td>.31</td>
<td>.44</td>
<td></td>
</tr>
</tbody>
</table>
Item 1 shows a negligible association with item 2, and low association with items 3 and 4. However, the coefficients of the other three items in their relative magnitude do not differ greatly between themselves. This shows that neither one of these items is any stronger than the rest; furthermore, that these four items can be combined in an index.

By assigning scores to individual cases on all the four items, responses to all the four items can be summarized. This index is not being based on a logical attempt to test unidimensionality or cumulativeness. An attempt, however, was made to develop a Guttman scale with these four items, which is by no means an adequate number with which to start. The procedure of the scale construction produced a coefficient of reproducibility of .87 and of scalability of .23. (See Appendix I-B.) By using this procedure, no gain was made over the inter-item correlation initially done (by summarizing the responses for each item), but the assumption that the four items together can form an index, was reinforced. Later, in exploring the relationship between various variables, the summary scores of responses to various items will be used; that way, the strategy of using indices will be consistent.

Next, the procedures followed for the dependent variable, attachment, will be discussed.
LEAF 65 OMITTED IN PAGE NUMBERING.
Dependent Variable: Attachment

The index of attachment to teaching consists of the following six items:

Response Categories

<table>
<thead>
<tr>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>-1</td>
</tr>
</tbody>
</table>

A. Success Dimension

1. The time I spend teaching is the most rewarding time I spend during a day.

2. To me success in things I do away from the job is more important than my success as a teacher.

B. Identity Dimension

3. I like to be identified as a teacher.

4. I would want one of my children to be a teacher.

C. Preference Dimension

5. I would stop teaching if I came into enough money.

6. I would choose teaching if I were to choose an occupation again.

In this index, the response category 'strongly disagree' was combined with the 'disagree' category, and the 'strongly agree' category with the 'agree' category. (See Appendix II, questionnaire.) The rationale for recognizing three dimensions of attachment is as follows.
As people do their jobs, they are expected to be successful in them. This expectation is internalized by people during their years of maturation. If people are not successful in their jobs, they are likely to lose face, which, in turn, precipitates feelings of inadequacy. Also, to be successful in their jobs, they have to devote energy and time in learning the pros and cons of their jobs. It is conceivable that people have only so much time which they can spend on their jobs and so much energy that they can expend in being successful in their jobs. By considering the time spent on the job to be rewarding, and by considering being successful on the job to be important, people can show their attachment to the job.

People come to be identified with the jobs they do; in this sense, their jobs acquire a personal relevance for them. They are attached to their jobs to the extent that they acknowledge this identification. Their social position relative to others, and their acceptance of that position, reinforces their sense of identification with the job. If people want one of their children to enter the same occupation as theirs, it would be a relatively strong measure of their identification with that occupation. Whatever their reason for wanting one of their children to be in the same occupation, they are carrying their identification over to the next generation, thus indicating their attachment to the job.
Having a job might be an economic necessity as well as a societal expectation. Both might be strong constraints to make people keep their job life relatively stable.

If the economic necessity of making money is removed and they still wish to engage in the occupation of their choice, it is an indication of their preference for that occupation; it is an indication that their occupation has acquired some intrinsic value for them. It is relatively strong evidence of their preference for a certain type of occupation if they choose that occupation over again when confronted with a choice. The assumptions implicitly introduced here are that there is a reasonable degree of correspondence between thoughts and words, and between words and actions; that people will express what they feel, and feel what they express; and that they will act according to what they say, and report what they have done.

In sum, attachment to the job is influenced by multiple factors. For one thing, several 'valuables' get built into the jobs in which people are engaged. One of the 'valuables' is the liking for the job strong enough to motivate them to engage in their job continuously and consistently. Other 'valuables' such as preference for it, development of an identity with it, and importance in being successful at it follow if and when people engage in their jobs continuously and consistently.

Using the previous strategy for calculating the mean scores for each respondent, and depending upon the excess
of positive over negative responses, the following possible scores are obtainable: + or - .16, .33, .50, .66, .83, and 1.00. In a 3 x 3 format of cross tabulation, three values on this variable can be formed:

No attachment = -.16 to -1.00 and .00
Low attachment = +.16 to +.33
High attachment = +.50 to 1.00

TABLE II.

Intercorrelation Matrix
of Items of Attachment

Kendall's tau

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>.20</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>.23</td>
<td>.14</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>.22</td>
<td>.18</td>
<td>.23</td>
<td>.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>.26</td>
<td>.34</td>
<td>.32</td>
<td>.41</td>
<td>.25</td>
<td></td>
</tr>
</tbody>
</table>

In order to find out if all the items of attachment taken together measured a single dimension, the above matrix was developed to examine the pattern of intercorrelation among the items, as well as their absolute magnitude.
It may be observed that within themselves, the relative sizes of the coefficients are not greatly different; they are distributed within a range of .14 to .41, showing a low to moderate association. The relationship between the items is not very strong, but as the direction of the relationship is in the affirmative, the items can be used in an index.

To secure a unidimensional scale, the items were subjected to Guttman scalogram analysis. To start with, as six items were involved, only three trials could be done. The maximum coefficient of reproducibility of .81 and scalability of .43 was obtained with items 6, 1, 2, and 5, entering the scale from the most difficult to the least difficult items. As mentioned earlier, ideally, a scale should have a coefficient of reproducibility of over .90 and of scalability of over .60. The relatively low coefficient of reproducibility obtained could be the result of the way the cutting points were introduced on the responses of these items. Initially, each of these items had five response categories: strongly agree, agree, uncertain, disagree, and strongly disagree. It was a simple decision to combine the strongly agree category with the agree category, and the strongly disagree category with the disagree category. But the uncertain category could not be eliminated because in one of the six items, the number of respondents choosing the uncertain category was more than 50%, and excluding that many cases from one item could involve a greater loss from
all the other items. A decision was made to retain the uncertain category. Then only two categories were formed: agree and all others; the reason for doing so was that the category agree is different from all the other categories. This procedure could have resulted in producing a greater number of errors in the construction of the Guttman scale. (See Appendix 1-C for the scale results.)

Of necessity, reliance had to be placed on the initial procedure, that of summarizing the scores on different items for individual cases; these scores will be used in forming values on the variable attachment. In cross-tabulations with other variables, the values thus formed will be used.

Dependent Variable: The Three Teaching Orientations

Regarding the variable 'emphasis on student relation', the following one item was used:

<table>
<thead>
<tr>
<th>Item</th>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong Emphasis</td>
</tr>
<tr>
<td></td>
<td>Moderate Emphasis</td>
</tr>
<tr>
<td></td>
<td>No Emphasis</td>
</tr>
</tbody>
</table>

Indicate the emphasis you place on interpersonal relations with students.

In analyzing the data, the response category 'weak emphasis' was collapsed with the 'moderate emphasis' category.

Regarding the instructional style of teachers, the following two items were used to supplement the student relations item:
Indicate the emphasis you place on the following aspects of instruction:

a) Subject-Matter
b) Discipline and Control

In analyzing the data, the response category 'weak emphasis' was collapsed with the 'moderate emphasis' category. Ideally, a strong emphasis on interpersonal relations is consistent with a moderate emphasis on subject-matter and/or moderate/no emphasis on discipline and control. If the relationship between attachment and a strong emphasis on student relations holds, as expected, the relationship between attachment and subject-matter should be negative, as should the relationship between attachment and emphasis on discipline and control. Each of these items will be related singly with the attachment index.

The following four items were used to elicit information regarding colleague relations among teachers:
Dependent Variable: Friendships

<table>
<thead>
<tr>
<th>Items</th>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How many teachers in your present school do you know that you enjoy getting together with?</td>
<td>Two     One     None</td>
</tr>
<tr>
<td>2. How many of these teachers do you regard as your personal friends (persons with whom you share confidences, nothing to do with the work of the school)?</td>
<td></td>
</tr>
<tr>
<td>3. How many teachers in other schools do you know that you enjoy getting together with?</td>
<td></td>
</tr>
<tr>
<td>4. How many of these teachers do you consider your close personal friends (same definition as above)?</td>
<td></td>
</tr>
</tbody>
</table>

Items 1 and 3 were used as lead questions to elicit information to questions 2 and 4. (Initially, a fourth category 'three and more' was provided, but in analyzing the data, it was combined with the category 'two'.)

We have presented the data analysis concerning the key variables of this research in the next chapter.
REFERENCES


6. SPSS, ibid., pp. 196-205.


Chapter III

ANALYSIS: FREEDOM OF WORK-RELATED CHOICES AND WORK-ATTACHMENT

It may be useful to sketch the main outline of analysis. One way to do this is to recall the questions raised earlier, in the first chapter, together with some of the ideas regarding data presentation.

The working hypotheses of this study stated that (a) choice of occupation, (b) choice of working conditions, and (c) discretion in work are related positively with work-attachment. Further, that work-attachment is related positively with (a) a strong emphasis on student relations, and consequently, with a low (or negative) emphasis on subject-matter, and discipline and control - these being the three teaching orientations, and (b) formation of friendships among teachers.

In presenting data, the three variables on work-related choices are treated as independent variables and work-attachment as the dependent variable; then work-attachment is treated as an independent variable and the three teaching orientations and the items on friendship are treated as the dependent variables.

The relationship between the three variables on work-related choices and work-attachment may be conceived and analyzed in the following temporal terms: choice of occupation
precedes choice of working conditions, and both precede
discretion in work; and each of them is related positively
with work-attachment. As discretion immediately precedes
work-attachment, whereas choice of occupation and choice of
working condition do not, and questions concerning them are
invoked retrospectively, the relationship between these
variables can be explored by using two empirical models.*

Model I

Choice of
Occupation \[\rightarrow\] Choice of
Working Conditions \[\rightarrow\] Discretion in Work \[\rightarrow\] Work-
Attachment

Model II

Choice of
Occupation \[\rightarrow\] Choice of
Working Conditions \[\rightarrow\] Discretion in Work \[\rightarrow\] Work-
Attachment

Model I, besides proposing a chain of positive
relationships between each of the independent variables and work-
attachment, proposes a positive relationship between the
independent variables themselves. Model II proposes that

* In these models, the unidirectedness of the arrows should
not be understood as more than the rule-of-thumb; the
assumption of feedback cannot be ruled out. Choice of occupation
is an experience prior to the job, whereas the exercise of
discretion in work is an experience which occurs on the job
itself, hence the convenient assumption of the time sequence
involved is implicit.
discretion, which immediately precedes work-attachment, independently affects work-attachment, and in turn is not produced or affected by choice of occupation and working conditions. The models, however, are heuristic, that is, a convenient way of presenting the statistical information rather than a theoretical classification of relationships between the variables involved.

I. Work-Related Choices and Work-Attachment

Following Model I, the correlation matrix on the next page shows a coefficient of .10, a low positive association between choice of occupation and choice of working conditions; a coefficient of .14 indicates a low positive association between choice of working conditions and discretion in work; a coefficient of .23 indicates a low positive association between choice of occupation and discretion in work.

Table III.2 shows a coefficient of .11, a low positive association between choice of occupation and work-attachment; a coefficient of .09 indicates a statistically non-existent relationship between choice of working conditions and work-attachment; again, a coefficient of .08 indicates a statistically non-existent relationship between discretion in work and work-attachment.

To check whether or not some information was lost in forming summative indexes of some variables, the relationships
**TABLE III.1: CORRELATION MATRIX FOR INDEPENDENT VARIABLES**

<table>
<thead>
<tr>
<th></th>
<th>CHOICE OF OCCUPATION</th>
<th>CHOICE OF WORKING CONDITIONS</th>
<th>DISCRETION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHOICE OF OCCUPATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHOICE OF WORKING CONDITIONS</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCRETION</td>
<td>.23</td>
<td>.14</td>
<td></td>
</tr>
</tbody>
</table>

Somers' D value is asymmetric in line with the direction of the relationship implied between the variables. In each case the variable treated as independent is on the top.

As Somers' D varies between -1.0 to +1.0, the strength of the association can be judged by the following conventions:

(- or +) .01 to .09, negligible association; 
.10 to .29, low association; 
.30 to .49, moderate association; 
.50 to .69, substantial association; and 
.70 or higher, strong association.
TABLE III.2: RELATIONSHIP BETWEEN CHOICE OF OCCUPATION, CHOICE OF WORKING CONDITIONS, DISCRETION ON-THE-JOB AND WORK-ATTACHMENT.

<table>
<thead>
<tr>
<th>WORK-ATTACHMENT:</th>
<th>MUCH</th>
<th>SOME</th>
<th>NONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>69</td>
<td>56</td>
<td>47</td>
</tr>
<tr>
<td>Low</td>
<td>11</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>None</td>
<td>20</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>(N= 100%)</td>
<td>(93)</td>
<td>(93)</td>
<td>(30)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHOICE OF WORKING CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORK-ATTACHMENT:</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>(N= 100%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISCRETION ON-THE-JOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORK-ATTACHMENT:</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>(N= 100%)</td>
</tr>
</tbody>
</table>

* Eight cases of no response on this item not included. Somers' D value is asymmetric whenever it appears. In this and the following tables, the independent variable is placed on top.
were examined by breaking the indexed variables into their component items. Table III.3 shows that the relationship does not gain any strength when choice of occupation is related to each of the six items of work-attachment, with the exception of item 4 - having one of the children in teaching - where the relationship is reversed.

Table III.4 shows that the strength of the relationship does not change when each of the four items on choice of working conditions is related with the summative index of work-attachment. Table III.5 shows that when the summative index of choice of working conditions is related with each of the six items of work-attachment, there is no noticeable change in the strength of the relationships, as compared to the original relationship between choice of working conditions and work-attachment.

Table III.6 shows that each of the nine items on discretion in work is related with the summative index of work-attachment, but the coefficients are similar to the original one (i.e., discretion in work and attachment, .08). In table III.7, the summative index of discretion in work is related with each of the six items of work-attachment, but the strength of the relationship does not change; there is, however, one item that shows a negative sign. The differences observed between the itemized coefficients and
TABLE III.3: RELATIONSHIP OF OCCUPATIONAL CHOICE WITH EACH OF THE SIX ITEMS OF ATTACHMENT

<table>
<thead>
<tr>
<th>ATTACHMENT ITEMS</th>
<th>OCCUPATIONAL CHOICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>.06</td>
</tr>
<tr>
<td>2.</td>
<td>.09</td>
</tr>
<tr>
<td>3.</td>
<td>.01</td>
</tr>
<tr>
<td>4.</td>
<td>-.06</td>
</tr>
<tr>
<td>5.</td>
<td>.17</td>
</tr>
<tr>
<td>6.</td>
<td>.10</td>
</tr>
<tr>
<td>Summative Index</td>
<td>.11</td>
</tr>
</tbody>
</table>

Somers' D value is asymmetric and is based on a 3 x 3 table in this and the following tables.
### Table III.4: Relationship between each of the four items of choice of working conditions and the summative index of attachment

**Somers' D**

**Choice of Working Conditions: Items**

<table>
<thead>
<tr>
<th>ATTACHMENT</th>
<th>Summative Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>.08</td>
</tr>
<tr>
<td>2.</td>
<td>.00</td>
</tr>
<tr>
<td>3.</td>
<td>.03</td>
</tr>
<tr>
<td>4.</td>
<td>.11</td>
</tr>
<tr>
<td><strong>Summative Index</strong></td>
<td><strong>.09</strong></td>
</tr>
</tbody>
</table>

### Table III.5: Relationship of the summative index of choice of working conditions with each of the six items of attachment

**Somers' D**

**Choice of Working Conditions**

<table>
<thead>
<tr>
<th>ATTACHMENT ITEMS:</th>
<th>Summative Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>.03</td>
</tr>
<tr>
<td>2.</td>
<td>.04</td>
</tr>
<tr>
<td>3.</td>
<td>.03</td>
</tr>
<tr>
<td>4.</td>
<td>.00</td>
</tr>
<tr>
<td>5.</td>
<td>.08</td>
</tr>
<tr>
<td>6.</td>
<td>.06</td>
</tr>
<tr>
<td><strong>Summative Index</strong></td>
<td><strong>.09</strong></td>
</tr>
</tbody>
</table>
TABLE III.6: RELATIONSHIP BETWEEN EACH OF THE NINE ITEMS OF DISCRETION AND THE SUMMATIVE INDEX OF ATTACHMENT.

<table>
<thead>
<tr>
<th>ATTACHMENT ITEMS:</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>Summative Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCRETION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summative Index</td>
<td>.04</td>
<td>.09</td>
<td>.02</td>
<td>.04</td>
<td>.06</td>
<td>.05</td>
<td>.00</td>
<td>.07</td>
<td>-.04</td>
<td>.08</td>
</tr>
</tbody>
</table>

TABLE III.7: RELATIONSHIP BETWEEN THE SUMMATIVE INDEX OF DISCRETION AND EACH OF THE SIX ITEMS OF ATTACHMENT.

<table>
<thead>
<tr>
<th>ATTACHMENT ITEMS:</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>Summative Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCRETION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summative Index</td>
<td>.03</td>
<td>.06</td>
<td>.03</td>
<td>.09</td>
<td>.03</td>
<td>-.01</td>
<td>.08</td>
</tr>
</tbody>
</table>
those based on summative indexes are negligible and may have been due to chance in the first place.

In sum, by developing indexes, hardly any information was lost. By itemizing each of the indexed variables, not a single item on the choice of working conditions, or on discretion in work, related appreciably with work-attachment. However, this procedure, by confirming the original negligible or low associations, provided a check on the hypothesized relationship between the variables on work-related choices and work-attachment.

2. Work-Attachment, Teaching Orientations, and Friendship Items

Next, the relationship between work-attachment and its concomitants is examined. Turning to table III.8, a coefficient of .03 indicates a non-existent relationship between attachment and emphasis on student relations (progressive orientation). The relationship between work-attachment and emphasis on subject-matter (traditional orientation) is negative as expected, and in line with the emphasis on student relations; but the coefficient of -.01 designates no relationship. Again, a coefficient of .07 indicates that work-attachment and an emphasis on discipline and control (authoritarian orientation) are not related.

Table III.9 shows a coefficient of .14, a low positive association between work-attachment and friendship with
TABLE III. 8: RELATIONSHIP BETWEEN WORK-ATTACHMENT AND EMPHASIS ON
STUDENT RELATIONS, SUBJECT MATTER, AND DISCIPLINE AND
CONTROL.

<table>
<thead>
<tr>
<th>EMPHASIS ON STUDENT RELATIONS:</th>
<th>WORK-ATTACHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Much</td>
<td>54</td>
</tr>
<tr>
<td>Some</td>
<td>36</td>
</tr>
<tr>
<td>None</td>
<td>10</td>
</tr>
<tr>
<td>(N= 100%)</td>
<td>(134)</td>
</tr>
</tbody>
</table>

Somers' D: .03

EMPHASIS ON SUBJECT MATTER: Much | 47 | 54 | 46
Some | 52 | 39 | 51
None |1 | 7 | 3
(N= 100%) | (133) | (43) | (41)

Somers' D: -.01

EMPHASIS ON DISCIPLINE AND CONTROL: Much | 29 | 18 | 29
Some | 63 | 73 | 51
None | 8 | 9 | 20
(N= 100%) | (137)| (44) | (41)

Somers' D: .07

* Six no response cases on student relations, seven no response cases on subject matter, and two no response cases on discipline and control items not included.
### TABLE III.9: RELATIONSHIP BETWEEN WORK-ATTACHMENT AND FRIENDSHIP WITH TEACHERS IN THE SAME SCHOOL AND OTHER SCHOOLS.

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>SAME SCHOOL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEACHER FRIENDS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td>54</td>
<td>50</td>
<td>33</td>
</tr>
<tr>
<td>Some</td>
<td>15</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>None</td>
<td>31</td>
<td>29</td>
<td>48</td>
</tr>
<tr>
<td>(N= 100%)</td>
<td>(135)</td>
<td>(44)</td>
<td>(43)</td>
</tr>
</tbody>
</table>

|                  |      |     |      |
|                  | Somers' D |
|                  | .14    |

|                  |      |     |      |
|                  |      |     |      |
| **OTHER SCHOOLS**|     |     |      |
| TEACHER FRIENDS: |      |     |      |
| Many             | 46   | 42  | 49   |
| Some             | 20   | 21  | 12   |
| None             | 34   | 37  | 39   |
| (N= 100%)        | (137)| (43)| (43) |

* Two no response cases on the same school and one no response case on other school items not included.
teachers in the same school. However, the association between work-attachment and friendship with teachers in other schools is negligible (.02).

The evidence presented so far lacks stringency either in disconfirming or supporting the working hypotheses; however, before drawing any conclusions, further analysis of the data is warranted.

3. Relative Effects of Variables on Work-Related Choices

Concerning Model II, it was suggested that discretion in work might affect work-attachment independent of the effects of choice of occupation and choice of working conditions. The following statistical requirements need to be met in order to test this model:

1. Discretion should be related to both the choice of occupation and choice of working conditions.

2. Both choice of occupation and working conditions should be related to work-attachment.

3.a. When choice of occupation is controlled, the relationship between discretion in work and work-attachment should stand in the two partial tables.

b. When discretion in work is controlled, the relationship between choice of occupation and work-attachment should stand in the two partial tables.

c. When choice of working condition is controlled, the relationship between discretion in work and work-attachment should stand in the two partial tables.
d. When discretion is controlled, the relationship between choice of working conditions and work-attachment should stand in the two partial tables.

4. The decision as to which of the three variables exercises a greater effect on work-attachment will be made on the basis of the relative size of the coefficients in the partial tables.

Already, the relationships among the three choice variables and between the choice variables and work-attachment, have been described, thus requirements 1 and 2 above have been met; however, the information relevant to requirements 3 and 4 needs to be presented.

First, requirement 3 is examined. The zero-order correlation observed earlier, between discretion in work and choice of occupation was .23; between choice of occupation and work-attachment was .11; and between discretion in work and work-attachment, it was .08. Table III.10 shows that when choice of occupation is controlled, the relationship between discretion in work and work-attachment in the two partial tables is not in line with the zero-order correlation. Table III.11 shows that when discretion is controlled, the relationship between choice of occupation and work-attachment is in line with the zero-order correlation. However, the association between choice of occupation and work-attachment remains low within the controlled categories of discretion.

Requirement 4 can now be examined. The zero-order
**TABLE III.10: RELATIONSHIP BETWEEN DISCRETION AND ATTACHMENT, CONTROLLING FOR CHOICE OF OCCUPATION**

| Attachment: | OCCUPATIONAL CHOICE | Discretion | | OCCUPATIONAL CHOICE | Discretion | |
|-------------|----------------------|------------|----------------|----------------------|------------|
|             | MUCH | Some | Somers' D | MUCH | Some | Somers' D |
| High        | 70   | 66   | 0.04       | 50   | 54   | -0.04     |
| Low         | 30   | 34   |            | 50   | 46   |            |
| (N=100%)    | (46) | (47) |            | (32) | (91) |            |

**TABLE III.11: RELATIONSHIP BETWEEN CHOICE OF OCCUPATION AND ATTACHMENT, CONTROLLING FOR DISCRETION**

<table>
<thead>
<tr>
<th>DISCRETION</th>
<th>OCCUPATIONAL CHOICE</th>
<th>Occupational Choice</th>
<th></th>
<th>DISCRETION</th>
<th>OCCUPATIONAL CHOICE</th>
<th>Occupational Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUCH</td>
<td>%</td>
<td>%</td>
<td>Somers' D</td>
<td>%</td>
<td>%</td>
<td>Somers' D</td>
</tr>
<tr>
<td>Attachment:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>70</td>
<td>50</td>
<td>0.20</td>
<td>66</td>
<td>54</td>
<td>0.12</td>
</tr>
<tr>
<td>Low</td>
<td>30</td>
<td>50</td>
<td>34</td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=100%)</td>
<td>(46)</td>
<td>(32)</td>
<td></td>
<td>(47)</td>
<td>(91)</td>
<td></td>
</tr>
</tbody>
</table>
correlation between choice of working conditions and discretion in work was .14; between choice of working conditions and work-attachment, it was .09; and between discretion in work and work-attachment, it was .08. Table III.12 shows that when controlled for choice of working conditions, the relation between discretion in work and work-attachment in the two partial tables reverses rather than staying in line with the zero-order correlation; besides, within the category 'working conditions-some choice', the size of the partial correlation between discretion and work-attachment increases to .25 as compared to .08, between discretion and work-attachment without controlling for choice of working conditions. Table III.13 shows that when controlled for discretion, the relationship between choice of working conditions and work-attachment reverses rather than staying in line with the zero-order correlation; besides, both of the partial tables show low associations between working conditions and work-attachment, compared to the negligible association originally observed between choice of working conditions and work-attachment.

From the summary of results in table III.14, it is observable that all of the three choice variables are intertwined and mutually contaminating; discretion in work seems to be conditionally related with work-attachment. How
### Table III.12: Relationship between Discretion and Attachment, Controlling for Choice of Working Conditions

<table>
<thead>
<tr>
<th>Working Conditions</th>
<th>Much Choice</th>
<th>Some Choice</th>
<th>Discretion</th>
<th>Somers' D</th>
<th>Working Conditions</th>
<th>Much Choice</th>
<th>Some Choice</th>
<th>Discretion</th>
<th>Somers' D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Much</td>
<td>Some</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment:</td>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>High</td>
<td>58</td>
<td>64</td>
<td>-0.06</td>
<td>74</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>42</td>
<td>36</td>
<td></td>
<td>26</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=100%)</td>
<td>(55)</td>
<td>(91)</td>
<td></td>
<td>(27)</td>
<td>(51)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table III.13: Relationship between Choice of Working Conditions and Attachment, Controlling for Discretion

<table>
<thead>
<tr>
<th>Discretion Much</th>
<th>Working Conditions</th>
<th>Much Choice</th>
<th>Some Choice</th>
<th>Somers' D</th>
<th>Discretion Some</th>
<th>Working Conditions</th>
<th>Much Choice</th>
<th>Some Choice</th>
<th>Somers' D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment:</td>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>58</td>
<td>74</td>
<td>-0.16</td>
<td>64</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>42</td>
<td>26</td>
<td></td>
<td>36</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=100%)</td>
<td>(55)</td>
<td>(27)</td>
<td></td>
<td>(91)</td>
<td>(51)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE III.14: SUMMARY OF THE RESULTS INDICATING THE RELATIONSHIP BETWEEN ONE INDEPENDENT AND A DEPENDENT VARIABLE WHILE CONTROLLING FOR ANOTHER INDEPENDENT VARIABLE

<table>
<thead>
<tr>
<th>DISCRETION controlled for Occupational Choice</th>
<th>CHOICE OF OCCUPATION controlled for Discretion</th>
<th>DISCRETION controlled for Working Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>Some</td>
<td>Much</td>
</tr>
<tr>
<td>ATTACHMENT</td>
<td>0.04</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

Somers' D values
much of this contamination is occurring due to chance, is not determinable at this point. However, the data analysis can be extended, rather than concluding prematurely that the relationships between the variables are weak or sometimes negligible. Assuming that the real strength of the relation between these variables is being cancelled out, reduced, or concealed by the intrusion of a third variable, which is sometimes called the 'suppressor' variable, the scope of the inquiry can be extended concurrently with the point made earlier that freedom concerning work-related choices can be defined, or at least understood, in the light of other variables. In extending the scope of data analysis, these other variables which might intercede with the relationship between the choice variables and work-attachment, and work-attachment and teaching orientations and friendship items, can be identified. Once that is done, some significant gains can be anticipated in the general argument of this study.

In the following chapter, some selected demographic variables are introduced into the data analysis in order to extend the scope of empirical investigation done so far.
Chapter IV

EXTENSION OF ANALYSIS: CONTROLS FOR DISTRICT SIZE, AGE AND SEX

The aim of this chapter is to take the analysis previously done a step further, and by including three demographic variables in the analysis, attempt to identify conditions under which the relationship between choice of occupation, choice of working conditions, discretion in work and work-attachment appears with special sharpness. By taking into account one or more key demographic variables initially not included in the explanatory model, one can begin to elaborate on the zero-order relationships (examined in the previous chapter) and try to answer the questions of "why" and "under what conditions" do the zero-order relationships become more exact, thus more meaningful?

Methodologically speaking, the strategy by which one pursues insights beyond the interpretation of predesignated or pre-data hypotheses and examines the data for new ideas and new insights, is called data-dredging, to use a phrase which in fact stands for relatively flexible research procedures. At this exploratory research stage, the use of the data-dredging strategy is important because it helps us to evolve the form of analysis, and consequently, enables us to strive towards more confident data-based conclusions than
those possible at the level of zero-order relationships. In the course of this analysis, we hope to maximize the fruitfulness of the theoretical argument of this research by providing post factum interpretations and 'chance' findings based on the serendipity principle.

The three demographic variables—school district size, age and sex—have been chosen because of their relevance to the general argument of this research. For instance, biological characteristics such as age and sex can act as limiting factors for the degree of freedom of work-related choices which individuals experience. By dividing the present sample according to age and sex categories, we will attempt to define in this exploratory study the conditions under which choices in certain sectors of work lead to work-attachment. Thus, the contribution made by certain demographic variables to data analysis and interpretation, however intuitively selected, should not be underestimated. Again, since schools are part of the larger units such as school districts, it can be argued that district size is a useful variable. If this variable is included in a relationship explaining teachers' sense of freedom of choice and work-attachment, it might bring to light certain noticeable differences among teachers. Perhaps the size of the school would be of equal importance, but
not always are most schools in a certain district receptive to social research, hence the number of schools participating and the number of teachers responding limit the use of school size as an intervening variable. No doubt, the size of the district is a crude measure of differentiation than school size would be, but the restrictions of the small sample in this study could not be off-set; hence attention is given to school district size.

In sum, two exploratory questions guide this analysis: One: In what manner are the demographic variables related to either the independent variables (work-related choices) or the dependent variable (work-attachment) or both? It should be noted that this is a necessary question because the kind of elaboration of zero-order relationships suggested above can be viewed as a sequence of steps, which proceeds by relating the demographic variables individually with the independent and dependent variables before the former variables are used as the control variables. The second question deriving from the first one, forms the main focus of analysis in the following pages: Are there any identifiable or propitious conditions created by the demographic variables under which the weak zero-order relationships are perhaps strengthened or altered? (By posing this question, we are in fact avoiding the misleading conclusion that the absence
of a strong relationship between variables concerning work-related choices and work-attachment observed in the previous chapter, is real.

In line with the sequence of steps which we must follow in this analysis, the three demographic variables (i.e., district size, age, and sex) were related to the three work-related choice variables and work-attachment. The following results were obtained: (a) Choice of Occupation and district size showed a negligible association; choice of occupation and age showed a low association (.15), favouring the young teachers (ages 22 to 35) rather than the old teachers (ages 36 to 65); and choice of occupation and sex showed a low association (.18), favouring women rather than men teachers; (b) Choice of Working Conditions showed an association with each of the three demographic variables that did not exceed .06; (c) Discretion in Work showed an association with each of the three demographic variables that was .07 or less; and (d) Work-Attachment showed a negligible association of .09 with age, favouring the old teachers; but the association with each of the two other demographic

* All associations are Somers' D associations. In the light of conventions listed in Chapter III, an association of .09 or less is negligible; of .10 to .29, a low association; of .30 to .49, a moderate association, and so forth. Thus the judgement on an association in this context is consistent with the conventions already listed.
variables did not exceed .06. As can be noted, almost all these associations are negligible, but when the data were retabulated by using the demographic variables as control variables, some interesting findings emerged which will now be presented and analyzed.

I. Choice of Occupation and Work-Attachment

Table IV.I shows the relationship between choice of occupation and work-attachment under controls for district size, age and sex.

In this table, by controlling for sex, the amount of association displayed in the two partials is different. For women, the strength of relationship between choice of occupation and work-attachment is indicated by a Somers' D of .32 (a moderate association) which shows an increase of seventeen correlation points over the zero-order association of .15 (see table IV.4). Again, within the two controlled categories of age, the association between choice of occupation and work-attachment is altered. For young teachers, the strength of relationship between choice of occupation and work-attachment is indicated by a Somers' D of .25 (a low association) which displays an increase of ten correlation points over the original zero-order association of .15.* But when district size is controlled, the amount of

* By using average percentage differences on the "high" work-attachment percentages across the two partial tables, the relative influence of one independent variable, controlling for the other, can also be determined.
Table IV.1: Relationship Between CHOICE OF OCCUPATION and WORK-ATTACHMENT Controlling for District Size, Age and Sex.

<table>
<thead>
<tr>
<th></th>
<th>SMALL DISTRICTS</th>
<th></th>
<th>LARGE DISTRICTS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Choice of Occupation</td>
<td></td>
<td>Choice of Occupation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
</tr>
<tr>
<td>Work-Attachment:</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>33</td>
<td>72</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>49</td>
<td>.16</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>(57)</td>
<td>(57)</td>
<td>(36)</td>
<td>(36)</td>
</tr>
</tbody>
</table>

YOUNG

|                  | Choice of Occupation |                  | Choice of Occupation |                  |
|                  | Much (%) | Some (%) | Somers' D | Much (%) | Some (%) | Somers' D |
| Work-Attachment:| High       | Low       | High       | Low       | High       | Low       | High       | Low       |
|                  | 68         | 32        | 69         | 31        | 67         | 33        | .25        | .32       |
|                  | 43         | 57        | .16        | 43        | 42         | 58        | .09        | .09       |
|                  | (54)       | (53)      | (39)       | (39)      | (58)       | (95)      | (35)       | (28)      |

OLD

MEN

|                  | Choice of Occupation |                  | Choice of Occupation |                  |
|                  | Much (%) | Some (%) | Somers' D | Much (%) | Some (%) | Somers' D |
| Work-Attachment:| High       | Low       | High       | Low       | High       | Low       | High       | Low       |
|                  | 67         | 33        | 71         | 29        | 67         | 33        | .25        | .32       |
|                  | 58         | 42        | .16        | 42        | 42         | 58        | .09        | .09       |
|                  | (58)       | (95)      | (35)       | (35)      | (58)       | (95)      | (35)       | (28)      |
relationship between choice of occupation and work-attachment displayed in the two partials remains the same as the original zero-order association of .15. However, for men and for old teachers, the direction of the relationship between choice of occupation and work-attachment is not contrary to our expectation but the size of the association suggests only a negligible relationship. Thus, the original zero-order association between choice of occupation and work-attachment is altered or strengthened noticeably only in case of women and young teachers.

2. Choice of Working Conditions and Work-Attachment

In table IV.2, under controls for district size, age and sex, the size of Somers' D associations between choice of working conditions and work-attachment for teachers in small districts (.12), for young teachers (.14), and for men teachers (.11) as compared to the zero-order association of .09, display only a weak relationship without adding any noteworthy improvement to its strength. For teachers in large districts, old teachers, and women teachers, the association between choice of working conditions and work-attachment is not more than .05. Since the strength of the relationship is determined by comparing the size of the partials with that of the zero-order association, it can be concluded that controlling for the demographic variables fails to bring about an improvement in the relation between choice of
Table IV.2: Relationship Between CHOICE OF WORKING CONDITIONS and WORK-ATTACHMENT Controlling for District Size, Age and Sex.

<table>
<thead>
<tr>
<th></th>
<th>SMALL DISTRICTS</th>
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<th>LARGE DISTRICTS</th>
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<tbody>
<tr>
<td></td>
<td>Choice of Working Conditions</td>
<td></td>
<td>Choice of Working Conditions</td>
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<tr>
<td></td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
</tr>
<tr>
<td>Work-Attachment:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>68</td>
<td>55</td>
<td>.12</td>
<td>68</td>
</tr>
<tr>
<td>Low</td>
<td>32</td>
<td>45</td>
<td></td>
<td>32</td>
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<tr>
<td></td>
<td>(37)</td>
<td>(94)</td>
<td></td>
<td>(22)</td>
</tr>
<tr>
<td>YOUNG</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Choice of</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Conditions</td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
</tr>
<tr>
<td>Work-Attachment:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>67</td>
<td>53</td>
<td>.14</td>
<td>69</td>
</tr>
<tr>
<td>Low</td>
<td>33</td>
<td>47</td>
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<td>31</td>
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<td>(33)</td>
<td>(78)</td>
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<tr>
<td>Choice of</td>
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<tr>
<td>Working Conditions</td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
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<tr>
<td>Work-Attachment:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>71</td>
<td>60</td>
<td>.11</td>
<td>61</td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
<td>40</td>
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<td>39</td>
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<tr>
<td></td>
<td>(41)</td>
<td>(119)</td>
<td></td>
<td>(18)</td>
</tr>
<tr>
<td>MEN</td>
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<td></td>
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<td></td>
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<tr>
<td>Choice of</td>
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</tr>
<tr>
<td>Working Conditions</td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
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<tr>
<td>Work-Attachment:</td>
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<td>High</td>
<td>71</td>
<td>60</td>
<td>.11</td>
<td>61</td>
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<td>Low</td>
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<td>40</td>
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<tr>
<td>WOMEN</td>
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<tr>
<td>Choice of</td>
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<tr>
<td>Working Conditions</td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td>Much (%)</td>
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<tr>
<td>Work-Attachment:</td>
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<td></td>
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<tr>
<td>High</td>
<td>71</td>
<td>60</td>
<td>.11</td>
<td>61</td>
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<td>39</td>
</tr>
<tr>
<td></td>
<td>(41)</td>
<td>(119)</td>
<td></td>
<td>(18)</td>
</tr>
</tbody>
</table>
working conditions and work-attachment.

3. Discretion in Work and Work-Attachment

When the relationship between discretion in work and work-attachment is examined under controls for the demographic variables, table IV.3 shows that for teachers in small districts, Somers' D association of .20 displays an improvement in the strength of the relationship as compared to the zero-order association of .07; however, for teachers in large districts, the low association of -.12 is contrary to our expectation suggesting that with less discretion in work, old teachers are likely to indicate high work-attachment. These differential results in the amount and direction of association displayed in the two partials cancel each other out in the original relationship; nevertheless, controlling for district size performs a useful function in making the zero-order relationship between discretion in work and work-attachment suspect.

Table IV.3 also shows a Somers' D of .10 for young teachers, indicating an increase of three correlation points over the zero-order association of .07, an increase which is of no consequence concerning the strength of relation between discretion in work and work-attachment. Controlling for sex does not bring out any clarification in the original relationship between discretion in work and work-attachment.
Table IV.3: Relationship Between DISCRETION IN WORK and WORK-ATTACHMENT, Controlling for District Size, Age and Sex.

<table>
<thead>
<tr>
<th></th>
<th>SMALL DISTRICTS</th>
<th></th>
<th>LARGE DISTRICTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discretion</td>
<td></td>
<td>Discretion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Much (%)</td>
<td>Some (%)</td>
<td>Somers' D</td>
<td></td>
</tr>
<tr>
<td>Work-Attachment:</td>
<td>High 71</td>
<td>51</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low 29</td>
<td>49</td>
<td>44</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>(N) 49</td>
<td>(82)</td>
<td>(32)</td>
<td>(61)</td>
</tr>
<tr>
<td></td>
<td>Discretion</td>
<td></td>
<td>Somers' D</td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>High 63</td>
<td>53</td>
<td>.10</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Low 37</td>
<td>47</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(N) 41</td>
<td>(70)</td>
<td>(40)</td>
<td>(73)</td>
</tr>
<tr>
<td></td>
<td>Discretion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>High 67</td>
<td>60</td>
<td>.06</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Low 33</td>
<td>40</td>
<td>38</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>(N) 57</td>
<td>(103)</td>
<td>(24)</td>
<td>(40)</td>
</tr>
<tr>
<td></td>
<td>Discretion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>High 62</td>
<td>55</td>
<td>.07</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Low 38</td>
<td>45</td>
<td>45</td>
<td>45</td>
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<tr>
<td></td>
<td>(N) 24</td>
<td>(40)</td>
<td>(24)</td>
<td>(40)</td>
</tr>
</tbody>
</table>

-103-
In summary, all the important observations made so far can be put together by reviewing the zero-order and partial associations provided in table IV.4. This table shows that high work-attachment is linked with high choice of occupation for (a) women teachers, (b) young teachers, and for teachers in (c) small and large districts. High work-attachment is also linked with high choice of working conditions for (a) teachers in small districts, (b) young teachers, and (c) men teachers. Again, high work-attachment is linked with high discretion in work for (a) teachers in small districts, and (b) young teachers; there is an inverse relation between discretion in work and high work-attachment for teachers in large school districts. An interpretation of these findings in light of the working hypotheses of this research and the general ideas pursued in the previous chapters is provided below.

4. Interpretation

To recapitulate, the original working hypotheses were concerned with the relationship between the following variables: (a) choice of occupation, (b) choice of working conditions, (c) discretion in work, and (d) work-attachment. In the course of analysis, the three demographic variables have demonstrated more accurately when and where significant deviations from the original statement of relationships might
Table IV.4: Summary of Associations (Somers' D) Between Work-Related Choice Items and Work-Attachment when Controlling for District Size, Age and Sex.

<table>
<thead>
<tr>
<th>Paired Variables</th>
<th>Zero-order Association</th>
<th>DISTRICT SIZE</th>
<th>AGE</th>
<th>SEX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>Large</td>
<td>Young</td>
</tr>
<tr>
<td>Choice of Occupation and</td>
<td>.15</td>
<td>.16</td>
<td>.15</td>
<td>.25</td>
</tr>
<tr>
<td>Work-Attachment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice of Working Conditions and</td>
<td>.09</td>
<td>.12</td>
<td>.05</td>
<td>.14</td>
</tr>
<tr>
<td>Work-Attachment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretion and Work-Attachment</td>
<td>.07</td>
<td>.20</td>
<td>-.12</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note: All variables were dichotomized for comparative correlational purposes.
be expected to occur. Stated differently, the original statements of relationships between variables must now take cognizance of at least one demographic variable which can be either the school district size in which the respondents are located, or it can be the age or the sex of the respondents. The findings demonstrating the influence of the demographic variables on the choice variables and work-attachment have confirmed the assumption made in Chapter I that freedom of work-related choices can be understood only with reference to the characteristics of those who make the choices or the social contexts in which the choices are made.

To further elaborate on the foregoing statement, the findings pertaining to each combination of variables dictate separate interpretations.

(a) Sex – Choice Items – Work-Attachment: A plausible interpretation can be given to the finding that the combination of being a woman and having a relatively high degree of choice concerning occupation is associated positively with high work-attachment (tables IV.1 and IV.4). It should be noted that we stress the word "plausible" as the interpretation that follows is a post factum interpretation.

The societal definition of being a woman (a fixed biological
characteristic), tends toward excluding her from 'achievement statuses' and to restricting her to routine statuses (marriage and family). Once this sex-line segregation takes place, a woman faces a life-long pattern of experiences confirming the original definition of her role.

Today working for remunerations outside the home has become an acceptable alternative for women; however, the fact that it may not be the first choice on their list of priorities is a different question. In the world of work dominated by men, teaching offers attractive prestige and money compared to other jobs available to women. But achievement in teaching does not open other areas for achievement, i.e., the span of their occupational choice relative to men continues to be limited. (Their achievement in one area of life, occupation, might even entail a reduction in their conventional "feminine" statuses entitling them to certain courtesies, e.g., independent and articulate women especially those who speak out for greater equality between the sexes, are stereotyped as "brainy" and "bossy" and are not shown the courtesies which are shown to more dependent and conventional women. Among dual-career families a wife earning more than the husband feels uncomfortable for having taken-over the man's role and depends on her husband for constant reassurance that she does not have the dominant role in the house, a role which has been the man's prerogative.
Some casual observation suggests that in organizations where both men and women are employed, some women would not want to be promoted because they could not stand to "give orders" to men and feel that men are not going to like them for being the bosses. These instances are illustrative but insufficient and considerable more systematic research is needed to develop the point fully as to what consequences follow from women's achievement statuses.

Women are usually found in clerical and service work, the lowest levels of management and the less prestigious, lower-paid "women's" professions - elementary education, nursing, social work and librarianship. As sex-typing of jobs has been challenged, women have become taxi drivers, jockeys, gas-station attendants, and construction workers. In other words, occupations considered unsuitable for women have opened up to female recruitment, though these trends of change vary enormously from period to period and country to country. Such trends, however, are likely to enhance the sense of achievement status for women and may consequently intensify their work-attachment. Thus the finding reported above, concerning women's high work-attachment linked with high occupational choice, suggests that perhaps women, relative to men, tend to make the most of what they are able to achieve in the world of work.

It should be noted that special consideration ought to be
given to the process of occupational choice by women. So far, most work on the problem of occupational choice has been confined to men and little systematic attention has been given to the different factors which operate for women by virtue of their sex-role definitions in society. It is not sufficient to assume that extrinsic rewards (e.g., income) of an occupation are enough in influencing occupational choice. This has yet to be shown empirically because the evidence provided by Turner suggests that the significance of extrinsic and intrinsic rewards (e.g., personal satisfaction) may differ as between men and women. Among the factors, proposed by Psathas as particularly relevant for women's occupational choice are the following: (a) the rating of the occupation by women; (b) their perception of how eligible males rate that occupation; and (c) their perception of how eligible males rate the women engaged in that particular occupation—a mode of reasoning combines marriage and family with a job outside the home and both become important elements in the process of occupational choice for women. For the time being, these points are to be accepted for their theoretical ingenuity, as data amenable to adequate analysis are not yet available.

As the sex-typing of occupations is becoming flexible, working for money outside the home is not considered a tragedy; it is an acceptable alternative even though one may find a woman who
can write that: "I am fortunate to be a woman, because that makes it easier for me to reject the tyranny of "work"." However, the evidence that our women respondents have supplied concerning high work-attachment contradicts some of the findings accumulated by Simpson and Simpson to the effect that women show low career commitment, lack of ambition, and lack of occupational community.

Since the finding on high work-attachment and high occupational choice is contingent upon a small sample of women teachers, it cannot be pulled out of its context through over-interpretation. Perhaps the remarks by one teacher best illustrate the finding reported above: "I have done office work, selling and play productions but teaching is the hardest, but the most rewarding - though not salary-wise." It may be that women envisage wider application of their skills and they envisage possibilities of change; it may be that being a woman is not concomitant with a differential perception of the world of work; or may be the acquired skills, competence and expertise are not differentiated according to sex-types. It may be that feelings such as these predispose women to show high work-attachment.

Concerning choice of working conditions, we observed in tables IV.2 and IV.4 that for women the association between choice of working conditions and work-attachment was negligible, while for men, the association was low (.11). For one thing, a large proportion of both women and men felt most constrained
about working conditions. But are there reasons to which differentials between women and men on choice of working conditions can be attributed? Are the perceptions of these choices different as between women and men? These questions cannot be argued adequately because it is impossible to suggest that there is something in the structure of school organizations which discriminates against women in a way that they tend to have a limited sense of choice concerning working conditions (i.e., choices with regard to the school district and the school they teach in, the subjects and the grades they teach). If the matter pertained to women in industry, there is evidence collected by Marchak that on job-control measures such as choice over task content, control over pacing and sequencing, control over quality and quantity of daily work, subjection to direct supervision, amount of discretion in work, and spatial arrangements at work, women were over-represented at the bottom of the scale (lack of control) and men were over-represented at the top of the scale (high level of control).  

There is no such evidence to suggest that women teachers as compared to men, are more often assigned to teach subjects in which they have not specialized. However, there are other instances in which women teachers feel left out; for instance, in the administrative structure of the public secondary schools, men tend to cluster in the highest positions; this would be true even when one took count of positions of heads of departments in schools, vice-principals and principals.
Since in most schools at the junior and senior secondary level, women teachers are in small numbers, it is not unusual to find a situation in which women teachers defer to decision-making by men teachers; sometimes, women teachers are just informed of the decision which has been made by the principal even though it might be a decision which affects the teacher concerned directly. In other situations, women teachers tend to withdraw from active involvement in the school affairs and attempt to concentrate on their work in the classrooms. However informative these instances might be, since they are based on the casual observations of this researcher during the data collection stage, they cannot be interpreted stringently. It could not be said on the basis of these instances that within schools, women's low sense of choice concerning working conditions is determined on sex-lines. Perhaps the finding on women teachers' sense of low choice in working conditions and low work-attachment sensitizes us toward a phenomenon which deserves independent study. This phenomenon is best illustrated by the intimate account of a black, Jewish, woman lawyer who describes herself as "thrice damned" in the practice of law. Her illuminating account demonstrates how multiple ascriptive attributes can represent jarring status "contradictions" in the "grey world of professionalism".12

Concerning discretion in work, we found in tables IV.3 and IV.4 that being a woman or a man and having little sense of
discretion in work makes for little work-attachment. The negligible association between discretion in work and work-attachment was contrary to our original expectation that exercise of discretion in work is associated positively with work-attachment. The assumption underlying the hypothesis on discretion was that for teachers, exercise of discretion in work constitutes an acknowledgement of their competencies, skills and expertise; that this acknowledgement is gratifying to them, and that it predisposes them to indicate high work-attachment. While this assumption is weakly supported both for women and men teachers, the data show that women teachers as compared to men, have slightly smaller proportions on high work-attachment when their discretion in work is low (table IV.3).

In attempting an interpretation of the findings both about men and women, perhaps the notion of "motivation" to exercise discretion can be explored. Motivation to exercise discretion has been considered as a relevant variable to the exclusion of variables such as salary differentials, differences in amount of training received, and subject-area specialization. The principle of exclusion consists in the simple consideration that any differences between men and women on these variables do not exist such that any one of these variables can have a differential influence on the exercise of discretion. Since motivation is a complex variable, its various underpinnings cannot be treated
extensively; however, it can be regarded as only a partial determinant of the findings concerning discretion in work.

It is conceivable that there are differences in the abilities of individuals to exercise discretion; both education and experience produce such differences. In addition, some individuals are more tolerant of risk and ambiguity than others. And such personal characteristics of individuals mix with the situations in which they do their jobs and at the same time exercise discretion in work.

Turning to the job context, it may be observed that cultural or "professional" norms discourage individuals from "gambling" with the lives of others, regardless of what they do to themselves, or how they manage their own affairs. Thus if teachers employ objective tests and if they assign low grades to students on the basis of the results of these objective tests, they can exonerate themselves from the consequences of errors of judgement. If in turn these low grades affect student careers adversely, it would not be attributable to teachers' evaluations. In other words, teachers are likely to evade discretion to the extent that they believe that the consequences of errors are falling on the students, and that the exercise of discretion is not to their advantage. For teachers, reliance on objective tests, as opposed to take-home assignments or essay type exams, does not mean the elimination of discretion, but rather the elimination of
some of the alternatives which might otherwise be considered.

If teachers avoid those decisions which are likely to affect students' careers adversely, it is an indication of their work-attachment, i.e., they have internalized the norm of responsible service to their students. They would rather err on the safe side than make decisions on inconclusive evidence.

Within the general argument presented above, the societal definition of being a man or woman can come into play too. Women, as opposed to men, are believed to have a 'compliant' disposition; within certain schools, they defer the decision-making to men teachers who tend to cluster in administrative positions. It may be that the societal definition of being a woman reinforces experiences within the schools in a way that women teachers will tend to internalize a conforming attitude toward teaching. Is little sense of discretion in work for women, a way of demonstrating their low tolerance of risk, ambiguity, and uncertainty? A counter-example would be a situation in which the job situation permits no discretion, but the individual is tempted to exercise it because within the organization, it is the exercise of discretion which hastens mobility; it would thus be a symptom of "aggression" and desire for "success", more in keeping with the characteristics which men are supposed to show.

Exercising discretion in work within the school organization is partially determined by how the principal administers the
school. Concerning choices in curriculum modification, one teacher had written in the questionnaire that there is "no choice, officially??". Concerning most of the questions tapping discretion in work, another teacher had written the comments: . . . "because of our principal . . . is largely 'much choice'; however, I have been in schools where 'no choice' would apply".

The content of the teaching practice is another determinant of whether or not a teacher will exercise discretion in work. For instance, concerning the choices in modifying evaluation standards, one teacher wrote: "To a large extent, academic standards are set by curriculum requirements. Unless certain areas are successfully completed, how does one honestly move a student to the next level?".

From these remarks by some teachers, it is understandable that there is a spatio-temporal dimension to exercising discretion in work; and this dimension can affect the work of all teachers regardless of their gender. Unfortunately, this dimension cannot be used to throw more light on the problematics of discretion because it is not present in the indices of discretion used in this research. However, it seems likely that in order to achieve a clear understanding of the conditions under which discretion is exercised and conditions under which it can be exercised, a longer list of teachers' activities would be required than was used in this research.
The point of the matter is that teaching as a job is to some extent a non-routine job requiring judgement on the part of those practicing it. There is room for teachers, both women and men, to monitor their work and seek to include teaching practices and curriculum goals which are congruent with their personal priorities. When they are seen to formalize procedures, or to rely on some precedents and objective evidence in accomplishing their instructional and student management tasks, they are in fact trying to control their work. This control over their work in turn determines their task performance. And teachers cannot ignore task performance because their rewards, both material and non-material, come about through the quality of their performance.

There is another angle from which the finding on discretion in work and work-attachment can be examined. A question can be raised as to whether or not there are differences between men and women concerning occupational aspirations or the pursuit of careers? It is a possibility that there are differences between men and women because presently the administrative structure of schools at the secondary level is represented by male employment; men teachers move into administrative positions, whereas women are believed to be interested in jobs and not careers. This generalization about women is not based on differentials of demonstrated competence, abilities, or managerial qualities, but on a stereotype of their work habits.
If these assumptions about the work habits of women and men were true, the differences between them concerning high discretion in work and high work-attachment would be more pronounced than they tend to be in the data presented in table IV.3.

Whatever slight differences in proportions exist between men and women on high work-attachment and high discretion in work, sex as a variable does not adequately explain those differences. It can only be concluded that controlling for the effects of sex on discretion in work and work-attachment has neither supported nor invalidated the working hypothesis that proposed a positive association between discretion in work and work-attachment. Rather, the analysis has given some weak empirical support to the analysis of the connection between discretion in work and work-attachment by demonstrating the necessity of using more stringent indices of discretion in work.

To recapitulate, the interpretations of findings along sex-lines are post factum, hence only plausible. But there is no denying the fact that the introduction of sex in the analysis has clarified substantially the working hypotheses and the general argument of this study that freedom of choice concerning occupation, working conditions, and discretion in work produces high work-attachment. The findings reported above have indicated that the span of work-related choices is limited, and partially determined by sex.
(b) Age - Choice Items - Work-Attachment: For young teachers, we found a positive low association between: choice of occupation and work-attachment, choice of working conditions and work-attachment, and discretion in work and work-attachment; for the old teachers, the associations were consistently negligible (table IV.4). An explanation follows.

A multitude of rights, obligations, privileges, and duties come to mind when one talks about the ascriptive status of the 'young' or the 'old'. A further reflection would bring to mind the differentials, between the young and the old, of alertness to competition, the importance of appearance and achievement (of goals of success, happiness, and progress), the capacity to deal with stress and change, and so forth.

Our distinction between the young teachers and old teachers does not rest on any such consideration; however, the differentials associated with each category can bear upon the interpretation of the findings. All teachers, 36-years old and over were grouped as old; and all those 35-years old and under were grouped as young. This cutting point was used to approximate a 50:50 split between the two categories; but the distinction needs to be remembered in interpreting the findings, lest misleading conclusions are reached.

What does it mean to be a young teacher, especially when one has made the initial choice, taken the training, and accepted
a teaching job? It is not too hard to imagine that during the first two years of teaching, performance is the single most important concern of the working teachers. For them, this performance includes their teaching methods, their ability to communicate with students, and to plan lessons. The school principal, a representative of the school board other than the principal, and sometimes the departmental head, are all involved in determining whether or not teachers are performing well. Teachers' retention in the school and the school district, and the concomitant rewards accruing to them depend entirely on the satisfactory performance of their many duties. It is not unusual for new and young teachers to direct and concentrate their energies at those points where effort makes the largest difference in their performance, and in their total rewards. If their performance is judged unsatisfactory, their employment elsewhere is threatened. In other words, young teachers cannot be entirely unconcerned with the goodwill of their employers, especially during the initial few years of their teaching career. Since they want to 'make it through' with their first assignment, they are usually enthusiastic about their job, and that enthusiasm perhaps makes up for their lack of experience in teaching. It is not unbecoming for teachers to make compromises concerning working conditions during their probationary period; since they are not as yet deeply grounded in their work in a particular
school and a school district, they may continue to envisage possibilities of change. As to the exercise of discretion in work, it comes about only when teachers have grasped the nature of their duties, understood the climate of the school in which they work, and gained some on-the-job experience.

Stated briefly, it is not unexpected that young teachers as opposed to old teachers will demonstrate high work-attachment while showing at least some choice concerning occupation, working conditions, and discretion in work. To illustrate, one teacher had commented in the questionnaire: "I am new to teaching - still feeling my way the clash of idealism and reality, etc."

Another teacher had said: "I may put more energy and enthusiasm into the two classes I teach" - this teacher also had some student counselling to do.

On the other hand, teachers who have been long in teaching experience a degree of reduction in their energy inputs and enthusiasm, which is by no means an uncommon experience, as one teachers illustrates: "After 2000 lessons how 'motivated' can a human being feel ...." Another teacher who had taught elementary school, junior secondary school, and who was teaching senior secondary at the time of data collection, wrote this comment on the questionnaire: "... teaching as a profession is much more demanding today than it was when I began my career. There are more demands and responsibilities placed on the teacher". Energy
and enthusiasm are the two ingredients which perhaps make the
difference between the inputs of old and young teachers, and
which consequently affect their work-attachment.

In the light of the above presentation, it can be said that
the inclusion of age in the analysis brings about a clarification
in working hypotheses of this research even though the effect that
age has on work-attachment is not substantial. Furthermore,
the argument is strengthened that if freedom of choice in certain
sectors of work is being studied, then it ought to be studied
together with the age or length of experience of those who work,
because the data of this research have indicated that age mixes
with freedom of choice to produce work-attachment. Such a mode
of inquiry will allow for specifying the conditions under which
a working hypothesis holds and thereby becomes a little more
precise than its earlier formulation.

(c) District Size - Choice Items - Work-Attachment: For
teachers working in small districts and in large districts, the
association between choice of occupation and work-attachment was
positive and low and was about the same size. The association
between choice of working conditions and work-attachment was
positive and low for small districts but negligible for large
districts; and the association between discretion in work and
work-attachment was positive but low for small districts, and
the association was negative and low for large districts.
To make these findings intelligible, it is necessary to describe in some detail the nature of 'district size' as a variable. As the relative influence of two variables (district size and choice items) is being evaluated on one variable, work-attachment, some caution is required in interpreting the meaning of the small districts and large districts.

It is worth emphasizing that regional differences among school districts are not only large and important but also multi-faceted. The school districts are different from each other on several dimensions simultaneously: for example, location (urban - rural, or distance from big urban centres), wealth, size (number of students, or schools), climatic conditions, number of specialist teachers employed, retention of teachers, and so forth.

In this study, the characterization of 'small districts' and 'large districts' is not very rigorous; it is based only on the number of schools in the district and the relative distance from metro-Vancouver. These indicators of distinction between districts would serve to provide an interpretation of the effect of district size on work-attachment, an effect which cannot be over-emphasized because of its intuitive character.

While journeying through the small districts, it is not surprising to find teachers assigned to teach subjects not necessarily in keeping with their areas of specialization because
fewer teachers are available to cover all the subjects offered. Again, it is not unusual for smaller districts to tend to employ teachers with minimum qualifications and little experience. This happens more as a matter of expediency, especially if the districts' climate is harsh because not many people choose to teach in such districts. If a district is both remote and climatically harsh, it might show a high rate of teacher turn-over; however, this is by no means a generalization because exceptions to such a tendency can be found. The internal atmosphere of the schools, the way the principals conceive of their role, and the strictness with which rules and regulations are enforced in the schools and the district, are the chief determinants of the performance of teachers in their work.

In addition to these objective considerations regarding district size, a mention should also be made of the subjective aspects involved. For instance, what about the feelings of teachers in such districts towards their role-conceptions and performance of teaching duties? What will their feelings be if they were faced with unemployment? What will they do if they had a job to do but not the kind of job that they would like to have if they had a wider range of choices? Whereas large districts can offer several amenities of life, teachers in small districts think of other compensations, as one teacher put it: "I like the kids in the small schools".
Very early in our presentation (Chapter I), it was indicated that perceptions of choice of occupation and working conditions are influenced by what people want and what they can get; therefore, it is not inevitable for people to have a sense of freedom of choice deriving from the actualities of experience. If teachers in smaller districts do not find working conditions entirely satisfactory, or if they envisage no possibilities or opportunities for a change, they cannot be expected to make a public announcement of their dislike. The same could be said of teachers in larger districts. Thus, it is understandable that teachers cannot remain entirely unconcerned with the goodwill of their chief employer, the district. (To argue otherwise requires a capacity to deny the 'reality' that goes well beyond ordinary psychology.)

What is deserving of note here is that, by and large, teachers accept quite a lot in their schools and school districts which they do not approve of wholeheartedly. Maybe they find it desirable to have a variety of choices in their teaching practice, opportunities for employment, ease of transfer from one school to another; but if they do not have as many choice as they would want to have, then perhaps they get used to not having them, and adapt to the conditions prevalent in their schools and districts. It is unlikely, therefore, that freedom of choice in certain sectors of work will have the consequences attributed to it - those
of high work-attachment, unless certain other conditions are present.

A point can be made that diversity within the school districts can be explained in objective terms, as was done above, but it also has to take account of the variations, however occasional and infrequent they may be, in the way in which teachers conceive of that diversity. Maybe this diversity is not a determinant of their work-attachment but a peripheral condition whose influence is mitigated by certain other compensatory conditions.

For large districts, the positive but negligible association between choice of working condition and work-attachment is perhaps a reflection of the limited opportunities of moving out of the school or school district. The negative low association between discretion in work and work-attachment is possibly the effect of district size, as Anderson has reported that the larger the size of the school, the more bureaucratic is the control of the employees - though this does not rule out completely the instances of individual discretion. (His observation would apply to the school studied in this sample because larger schools are found in larger districts.) Anderson has also reported that the commitment of employees varies inversely with the number of bureaucratic rules; to do their job, teachers need not be committed to education in a professional sense because lesson plans can be prepared according to specifications, prescribed
curriculum guides can be rigidly followed, grading procedures can be carried out exactly, and teachers may make little or no effort beyond what is required of them. Furthermore, teachers who find it impossible to realize their expectations will tend to abandon their professional orientations and will accept a more rewarding bureaucratic orientation.  

We should hasten to add that our data do not directly suggest the kind of inference or interpretation that we have attempted. It is not an unlikely interpretation though, considering the fact that the interpretation is post factum, and transcends the conditions which our working hypotheses did not identify. The introduction of district size in the analysis, especially the findings reported above, has indicated that certain important influences can be exerted by a variable which was considered as peripheral to the original statements of relationships between certain variables.

Next we will turn to an extended analysis of the two faces of attachment and how work-attachment is linked with friendships among teachers and the three teaching orientations.
REFERENCES


4. This mode of inquiry is in line with the discussion provided in M. Rosenberg, The Logic of Survey Analysis, New York: Basic Books, 1958, Ch. 4.

5. Ibid., pp. 174-78.


Chapter V

EXTENSION OF ANALYSIS: THE TWO FACES OF ATTACHMENT UNDER CONTROLS FOR DISTRICT SIZE, AGE AND SEX

In this chapter, our aim is to extend the scope of the argument and the strategy of analysis applied in the previous chapter and to examine the relationship between work-attachment and friendships among teachers, and work-attachment and the three teaching orientations under controls of the demographic variables.

1. Work-Attachment and Friendship Items

Earlier in Chapter III, the data failed to give a substantial support to the hypothesis that teachers highly attached to their job are likely to have many personal friends among colleagues in their own school as well as other schools. While it is apparent that teachers are never physically alone while at work in the schools, their physical contiguity in itself is not sufficient to promote friendship in the sense that teachers would share confidences with their colleagues and discuss matters not related with the work of the school. It was assumed, therefore, that for friendship to exist among teachers, there must be a motivating "force". This force was presumed to be work-attachment which acts as a "pull factor".

The analysis that follows is a further examination of the postulated relationship between work-attachment and having many friends among other teachers in the same school and schools elsewhere.
The questions guiding this analysis are the following: (1) Is the weak association between work-attachment and having friends among colleagues (in the same school and in other schools) the result of the effect of another variable, i.e., school district size, age, or sex? (2) Is it possible that by introducing the three demographic variables, certain conditions can be identified under which the relationship between work-attachment and teacher-teacher friendship is strengthened or altered? In order to answer these questions in light of the statistical requirement that must be met, the demographic variables were examined in relation with work-attachment and friendship items. The results obtained are as follows: \( \text{***} \) (a) work-attachment showed a negligible association of .09 with age, favouring the old teachers; but the association with district size and age did not exceed .06; (b) the association between friendships (same school) and district size, age, and sex was close to zero; and (c) the association between friendships (other schools) and age was low (.14, favouring the old teachers); but the association of this item with district size and sex was close to zero.

When the data are retabulated according to the two values of district size, table V.1, we observe that for teachers in large districts, the association between work-attachment and having many friends (same school) of .20 improves by seven correlation points over

\( \text{***} \) All associations are Somers' D associations; an association of .09 or less is negligible; of .10 to .29, low; of .30 to .49, moderate, and so forth.
Table V.1: Relationship Between WORK-ATTACHMENT and FRIENDSHIP ITEMS Controlling for DISTRICT SIZE.

<table>
<thead>
<tr>
<th>Friendship Items</th>
<th>SMALL DISTRICTS</th>
<th></th>
<th>LARGE DISTRICTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work-Attachment</td>
<td>Somers' D</td>
<td>Work-Attachment</td>
<td>Somers' D</td>
</tr>
<tr>
<td></td>
<td>High (%)</td>
<td>Low (%)</td>
<td>High (%)</td>
<td>Low (%)</td>
</tr>
<tr>
<td>Friendships (SAME SCHOOL):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td>54</td>
<td>46</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>Some</td>
<td>46</td>
<td>54</td>
<td>47</td>
<td>67</td>
</tr>
<tr>
<td>(N)</td>
<td>(77)</td>
<td>(54)</td>
<td>(58)</td>
<td>(33)</td>
</tr>
<tr>
<td>Friendships (OTHER SCHOOLS):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td>40</td>
<td>49</td>
<td>53</td>
<td>39</td>
</tr>
<tr>
<td>Some</td>
<td>60</td>
<td>51</td>
<td>47</td>
<td>61</td>
</tr>
<tr>
<td>(N)</td>
<td>(77)</td>
<td>(53)</td>
<td>(60)</td>
<td>(33)</td>
</tr>
</tbody>
</table>

Note: In this and the following tables N is likely to fluctuate because no-response cases for the item used as a dependent variable were not included in computations.
the original association of .13; the association between work-attachment and having many friends (other schools) of .14 improves by thirteen correlation points over the original association which is close to zero (see table V.7 for a quick comparison). For small districts, the negligible association of -.09 between work-attachment and having many friends (other schools) is contrary to our expectation because it suggests that teachers with low work-attachment are likely to have more friends in other schools.

When age is controlled, table V.2, the noteworthy finding is that for young teachers, the association between work-attachment and having many friends (same school) increases to .16 from the original association of .13; this increase is of little importance because the relationship remains weak despite the introduction of a control variable, age. For old teachers, the negligible association of -.08 is contrary to our expectation because it suggests that teachers with low work-attachment are likely to have many friends among teachers in other schools.

When sex is controlled in table V.3, for women teachers, the association between work-attachment and having many friends in the same school increases to .43 as compared to the original association of .13. Again, for women teachers, work-attachment and having many friends (other schools) show an association of .11 as compared to the original association of .01, suggesting a weak relationship where none existed before controlling for sex.

An interpretation of the findings reported so far will be provided later.
Table V.2: Relationship Between WORK-ATTACHMENT and FRIENDSHIP ITEMS Controlling for AGE.

<table>
<thead>
<tr>
<th>Friendship Items</th>
<th>Young</th>
<th></th>
<th>Old</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Work-Attachment</td>
<td></td>
<td>Work-Attachment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (%)</td>
<td>Low (%)</td>
<td>High (%)</td>
</tr>
<tr>
<td>Friendships (SAME SCHOOL):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td>54</td>
<td>37</td>
<td>D</td>
<td>54</td>
</tr>
<tr>
<td>Some</td>
<td>44</td>
<td>63</td>
<td>.16</td>
<td>46</td>
</tr>
<tr>
<td>(N)</td>
<td>(63)</td>
<td>(48)</td>
<td></td>
<td>(72)</td>
</tr>
<tr>
<td>Friendships (OTHER SCHOOLS):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many</td>
<td>41</td>
<td>35</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Some</td>
<td>58</td>
<td>65</td>
<td>.06</td>
<td>50</td>
</tr>
<tr>
<td>(N)</td>
<td>(63)</td>
<td>(48)</td>
<td></td>
<td>(74)</td>
</tr>
</tbody>
</table>
Table V.3: Relationship Between WORK-ATTACHMENT and FRIENDSHIP ITEMS Controlling for SEX.

| Friendship Items | MEN | | WOMEN | | |
|------------------|-----|-----|--------|-----|-----|-----|-----|
|                  | Work-Attachment |       | Work-Attachment |       | |
|                  | High (%) | Low (%) | Somers' D | High (%) | Low (%) | Somers' D | |
| Friendships (SAME SCHOOL): | | | | | | |
| Many            | 50      | 50      | --       | 65      | 22      | .43      | |
| Some            | 50      | 50      | --       | 35      | 78      | .43      | |
| (N)             | (98)    | (60)    |          | (37)    | (27)    |          | |
| Friendships (OTHER SCHOOLS): | | | | | | |
| Many            | 44      | 47      | .03      | 51      | 41      | .11      | |
| Some            | 56      | 53      | .03      | 49      | 59      | .11      | |
| (N)             | (100)   | (59)    |          | (37)    | (27)    |          | |
2. Work-Attachment and the Teaching Orientations

The statement, that teachers highly attached to teaching are likely to emphasize strongly student relations in their teaching practices rather than emphasize subject-matter or discipline and control, did not receive adequate support in the earlier analysis. The underlying assumption for the hypothesis was that an equal emphasis on each of these orientations is not compatible. As these orientations are not concerned with 'what teachers do', but rather with 'how they are doing it', the findings will be placed in the context of the teaching activities.

To begin, if these teaching orientations are not compatible, then they should not relate one with another in a matrix of inter-correlations. To test this out, the three teaching orientations were related one with another. The results showed that there is an inverse relation between emphasis on subject-matter and emphasis on student relations and that this relation is in the expected direction. However, a low positive association between emphasis on subject-matter and discipline and control (.19), suggests that these two orientations might be compatible, without each being compatible with emphasis on student relations.

This finding opens up a line of inquiry that has not yet been touched by the arguments of this research. A possible interpretation of this finding will be attempted later.

The teaching orientations were also related with each of the demographic variables. The results obtained were that
(a) a strong emphasis on student relations showed a low association of .12 with sex, favouring women teachers; but the association with district size and age did not exceed .06; (b) a strong emphasis on subject-matter showed a low association of .15 with district size, favouring the large districts; but the association with age and sex was less than .07; (c) a strong emphasis on discipline and control showed a low association of .15 with district size, favouring the large districts; but the association with age was .06, and with sex, close to zero.

When district size is controlled in table V.4, the only noteworthy finding is the low association of .11 (compared to the original of .05) between work-attachment and discipline and control; this association is contrary to our expectation because it suggests that teachers with "high" work-attachment are likely to place a "strong" emphasis on discipline and control. All the other partial associations in table V.4 do not exceed .06; only the direction which they display in the relationship is in line with our expectation.

In controlling for age in table V.5, the partial associations do not display any mentionable alteration in comparison with the original relationship between work-attachment and the teaching orientations, with one exception: for old teachers, the strength of the relationship is indicated by an association of .19 as compared to the zero-order association of .05. Furthermore, for young teachers, the direction of the relationship between work-attachment and
Table V.4: Relationship Between WORK-ATTACHMENT and the TEACHING ORIENTATIONS Controlling for DISTRICT SIZE.

<table>
<thead>
<tr>
<th>Teaching Orientations</th>
<th>Work-Attachment</th>
<th>Work-Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High (%)</td>
<td>Low (%)</td>
</tr>
<tr>
<td>Emphasis on STUDENT RELATIONS:</td>
<td></td>
<td>Somers' D</td>
</tr>
<tr>
<td>Strong</td>
<td>51</td>
<td>47</td>
</tr>
<tr>
<td>Moderate</td>
<td>49</td>
<td>53</td>
</tr>
<tr>
<td>(N)</td>
<td>(75)</td>
<td>(51)</td>
</tr>
<tr>
<td>Emphasis on SUBJECT-MATTER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>39</td>
<td>45</td>
</tr>
<tr>
<td>Moderate</td>
<td>61</td>
<td>55</td>
</tr>
<tr>
<td>(N)</td>
<td>(74)</td>
<td>(51)</td>
</tr>
<tr>
<td>Emphasis on DISCIPLINE &amp; CONTROL:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>Moderate</td>
<td>75</td>
<td>87</td>
</tr>
<tr>
<td>(N)</td>
<td>(77)</td>
<td>(52)</td>
</tr>
</tbody>
</table>
Table V.5: Relationship Between WORK-ATTACHMENT and the TEACHING ORIENTATIONS Controlling for AGE.

<table>
<thead>
<tr>
<th>Teaching Orientations</th>
<th>YOUNG</th>
<th>Old</th>
<th>Somers' D</th>
<th>Somers' D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-Attachment</td>
<td>High (%)</td>
<td>Low (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on STUDENT RELATIONS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>52</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>48</td>
<td>42</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>(N)</td>
<td>(63)</td>
<td>(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on SUBJECT-MATTER:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>46</td>
<td>46</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>Moderate</td>
<td>54</td>
<td>54</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>(N)</td>
<td>(61)</td>
<td>(46)</td>
<td></td>
<td>(72)</td>
</tr>
<tr>
<td>Emphasis on DISCIPLINE &amp; CONTROL:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>25</td>
<td>21</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Moderate</td>
<td>75</td>
<td>79</td>
<td>.04</td>
<td>69</td>
</tr>
<tr>
<td>(N)</td>
<td>(63)</td>
<td>(48)</td>
<td></td>
<td>(74)</td>
</tr>
</tbody>
</table>
a strong emphasis on student relations is contrary to our expectation; again, for both the young and old teachers, the direction of the relationship between work-attachment and a strong emphasis on discipline and control is contrary to our expectations.

When the data are rearranged according to the two categories of sex in table V.6, the partial associations linking work-attachment with each of the three teaching orientations do not display any mentionable alteration in comparison with the original association of .05. Here, again, only the direction of the relationship displayed between work-attachment and emphasis on student relations and on subject-matter is in line with our expectation; this finding is consistent for both men and women teachers. However, the negligible association of .07 between work-attachment and emphasis on discipline and control noticed for men also, is contrary to our expectation.

In summary, even by dividing the sample according to two categories of district size, age and sex, the data have not shown any appreciable change in the strength of association between work-attachment and the three teaching orientations. It is possible that the explanations for differential emphases on student relations, subject-matter, and discipline and control, lie in the subject-areas which teachers offer. To elaborate on this statement, the sample needs to be further stratified, something which is impossible because the present sample is not large enough to permit multi-stratification. Since the data analysis
Table V.6: Relationship Between WORK-ATTACHMENT and the TEACHING ORIENTATIONS Controlling for SEX.

<table>
<thead>
<tr>
<th>Teaching Orientations</th>
<th>Work-Attachment</th>
<th></th>
<th>Work-Attachment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High (%)</td>
<td>Low (%)</td>
<td>Somers' D</td>
<td>High (%)</td>
</tr>
<tr>
<td>Emphasis on STUDENT RELATIONS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>50</td>
<td>46</td>
<td>D</td>
<td>64</td>
</tr>
<tr>
<td>Moderate</td>
<td>50</td>
<td>54</td>
<td>.04</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(98)</td>
<td>(57)</td>
<td></td>
<td>(36)</td>
</tr>
<tr>
<td>Emphasis on SUBJECT-MATTER:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>44</td>
<td>48</td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Moderate</td>
<td>56</td>
<td>52</td>
<td>-.04</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>(99)</td>
<td>(58)</td>
<td></td>
<td>(34)</td>
</tr>
<tr>
<td>Emphasis on DISCIPLINE &amp; CONTROL:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>29</td>
<td>22</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Moderate</td>
<td>71</td>
<td>78</td>
<td>.07</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>(59)</td>
<td></td>
<td>(37)</td>
</tr>
</tbody>
</table>
under control variables has failed to bring about an appreciable alteration in the strength of the relationship between work-attachment and the teaching orientations, the findings as they stand will be summarized and interpreted critically, albeit later.

3. Interpretation

Work-Attachment - Friendships: All of the important findings which deserve interpretation and which help us in maximizing our theoretical argument linking "high" work-attachment and the occurrence of "many" friendships among teachers (in the same school and elsewhere), can be gleaned from the summary table V.7. This table shows that high work-attachment and having many friends (same school) are linked only for teachers located in large school districts, for young teachers, and for women teachers; again, high work-attachment and having many friends (other schools) are linked only for teachers located in large districts and for women teachers. Since only five partials out of twelve tend to support our working hypothesis, these findings and the absence of a substantial support for the working hypothesis need to be given an extended critical comment.

The findings reported above are quite important when understood in light of the opportunities which the teachers have for face-to-face contacts with their colleagues. The circumstances in which teachers get to know other teachers or to befriend other teachers are equally important, but these circumstances, by themselves, do not promote friendships. The point deserves elaboration.
Table V.7: Summary of Associations (Somers' D) Between Work-Attachment and Friendship Items, and Work-Attachment and Teaching Orientations when Controlling for District Size, Age and Sex.

<table>
<thead>
<tr>
<th>Friendship Items</th>
<th>Zero-order Association</th>
<th>DISTRICT SIZE</th>
<th>AGE</th>
<th>SEX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small</td>
<td>Large</td>
<td>Young</td>
</tr>
<tr>
<td>Work-Attachment &amp; Friendships (SAME SCHOOL)</td>
<td>.13</td>
<td>.08</td>
<td>.20</td>
<td>.16</td>
</tr>
<tr>
<td>Work-Attachment &amp; Friendships (OTHER SCHOOLS)</td>
<td>.01</td>
<td>-.09</td>
<td>.14</td>
<td>.06</td>
</tr>
<tr>
<td>Teaching Orientations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-Attachment &amp; Emphasis on STUDENT RELATIONS</td>
<td>.05</td>
<td>.04</td>
<td>.06</td>
<td>-.06</td>
</tr>
<tr>
<td>Work-Attachment &amp; Emphasis on SUBJECT-MATTER</td>
<td>-.03</td>
<td>-.06</td>
<td>-.02</td>
<td>--</td>
</tr>
<tr>
<td>Work-Attachment &amp; Emphasis on DISCIPLINE &amp; CONTROL</td>
<td>.05</td>
<td>.11</td>
<td>-.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note: All variables were dichotomized for comparative correlational purposes.
Most teachers are busy most of the day working with students. The lunch breaks, the occasional staff meetings, and "socials" are some of the occasions which bring teachers together, but the quality of contacts generated by such occasions is hardly conducive to sustained interpersonal contacts or friendships as defined in this research.

Again, teachers can be seen together in the staff room during lunch breaks, but there is considerable variation in how much the different teachers talk, and in the degree to which any one teacher will talk to any other teacher.

Moreover, getting to know other teachers is made possible and easy in schools which are divided into departments. This happens primarily in large districts in which the size of the school is large enough to be divided into departments. Teachers belonging to the same department are frequently in contact as they have to consult with each other over lesson plans for different grade levels and for different subject areas. Knowing other teachers is also made possible, occasionally, by "problem" students because teachers do talk to each other about such students. Thus it seems probable that in larger districts and larger schools, teachers have many opportunities, within the work of the school, to associate with colleagues. Just the frequency of interaction may be a sufficient condition for promoting sustained contacts which converge towards friendships among teachers.

In addition, the code of ethics adopted by the B.C. Federation
of Teachers exhorts its member teachers to review and assess with their colleagues, the practices which they employ in discharging their duties, that is service to students. This expectation in itself does not warrant teacher interaction because (a) unsolicited assistance is seldom, if ever, initiated, even though teachers might regard "good" colleagues as those who show a willingness to share their knowledge; (b) limited consultation takes place between teachers in the same department, teaching the same subject and not between teachers offering different subjects; and (c) there are always special committees handling different 'problem areas', and teachers on such committees meet each other more often than they would others.

If the data on teacher-teacher friendships, within large districts, are examined in the light of the foregoing observations, then the data become more meaningful; the data bear out some of the aspects of the on-going contacts of teachers within the work of the schools. The notion that friendships are "extra-organizational", that is, something which must be generated by the teachers' liking for their jobs, can be further supported by citing evidence on how the district size itself can promote satisfaction with the job. For instance, the study of teacher supply and demand in B.C. has reported that the larger school districts, which are mostly urban, possessed the highest number of teachers who reported the most satisfaction with their teaching assignments. But for small districts, the study reported findings somewhat
opposite to those reported for the large districts. Thus it seems that district size in itself is a complex variable and that its effect on promoting work-attachment cannot be underestimated.

When the findings under examination are complemented with the data on frequency distribution of friendship, it was found that 66% of the teachers had at least one personal friend among colleagues in the same school, while 64% of the teachers had at least one friend among teachers in other schools. Thus a fair proportion of teachers tend to meet the minimal requirement (having at least one personal friend among other teachers) of possessing a "second face" of their work-attachment. However, it can be added that the evidence presented in the preceding pages, though it is less than conclusive, is not without its importance. The measure of friendship used in this research is quite stringent and this stringency ought to make up for the absence of substantial statistical evidence for the working hypothesis that high work-attachment is positively associated with having many friends among colleagues in the same and other schools.

An uncontrollable circumstance that can make the postulated relationship inexact is the individual teacher's personal preference for forming many friendships among colleagues, notwithstanding the opportunities available and the locations of the schools. Accounting for the differentials in teachers' preferences is a complex matter; this added complexity is
acknowledgeable, but it is assumed away in stipulating a positive association between work-attachment and having many friends among other teachers. The comments by one teacher on the questionnaire bring home the point very concisely: "I enjoyed your questions on relationships with other teachers. It made me realize how isolated we often are with fellow workers; how little we share each others' company outside of teaching. Maybe we are too selfish with our time – we need to look at each other as fellow humans, not just as teachers."

We may concede the point that the working hypothesis of this research apparently generates a critical perspective on work-attachment and teacher-teacher friendships, but this perspective tends to be restricted and fragmented.

Though we present it cautiously, the interpretation of two other interesting findings emerging from our analysis, indicate the apparent impact of age and sex on the relationship between work-attachment and having many friends among other teachers. Concerning age, table V.7 shows that young teachers, compared to the old, with high work-attachment, are more likely to have many friends among teachers in their own school. Morrison and McIntyre have observed, though they do not present any hard data, that young teachers who have recently left their training institutions, if they want the satisfaction and support to be gained from acceptance by their colleagues, must commonly aspire to membership in groups of relatively experienced teachers.
But where such young teachers find a sizable minority of others in their own position, they may often find their company more pleasant and less demanding. Concerning sex, table V.7 shows that women rather than men teachers, with high work-attachment, are more likely to have many friends among other teachers (in the same school as well as other schools). Again, Morrison and McIntyre have observed that sex and marital status are important determinants of the formation of social groups. Married women who have entered or returned to teaching after raising their families, increasingly form sizable minorities with common interests. Since they have introduced a new variable, marital status, their observation needs some empirical support. Unfortunately, we could not control for marital status simultaneously with sex because the sub-sample of women respondents was too small to make that analysis meaningful; hence the post factum character of the interpretation provided is incontestable.

**Work-Attachment – Teaching Orientations:** We mentioned earlier that a strong emphasis on subject-matter and on discipline and control were linked in the data, and this observation needs to be explained. What else needs to be explained is the general absence of empirical support for the working hypothesis that teachers with high work-attachment are more likely to emphasize strongly student relations and consequently, to deemphasize subject-matter and discipline and control in their teaching practices. In the summary table V.7, for old teachers,
there is some weak support concerning the relationship between work-attachment and a strong emphasis on student relations; all the other partials, except the one for young teachers, indicate only a slight tendency in the data in the direction of our working hypothesis. Again, in table V.7, all the partials concerning the relationship between work-attachment and a low emphasis on subject-matter are negative, indicating a slight tendency in the data in the direction of our hypothesis, but the amount of relationship displayed in these partials is negligible. And again, all the partials with the exception of one for large districts, concerning the relationship between work-attachment and a low emphasis on discipline and control, are contrary to our expectation. A possible explanation of these disparate findings is given below.

The findings reported above can be made intelligible with reference to what teachers are "expected" to do and what they "seem" to do and by leaving aside the complex issue of what they would "like" to do; this latter aspect of the teachers' work lies outside the scope of this study. However, this approach helps to highlight some of the elements of the workings of the school and to explain how the teaching activity is carried on. The latter are matters deserving of attention, but to which only passing references can be made, owing to the more pressing problem of establishing the relevance of the finding just mentioned. What we cannot do is to establish a close "fit" between the different
elements of the workings of the schools, and consequently, we cannot show how the teachers' behaviours "logically" follow from the interplay of these elements. To do so would require much more data, observational or otherwise, than we have available. However, a reference to these elements is being made because their influence on the on-going activities of teachers cannot be controlled. It follows, therefore, that the plausible character of the interpretations of findings should not be overlooked.

To begin, the Public Schools Act expects a teacher to "teach all the pupils under his care diligently and faithfully all the branches of learning required to be taught by him in the school to which he is assigned, and maintain proper order and discipline among the pupils attending the school ...". The obvious omission of the student-relations aspect of teachers' work leaves it open to the teachers themselves as to whether or not they adopt this approach in their teaching practices. The teachers who adopt the student-relations approach, would be over-stepping their duties, as mentioned in the Act.

The low association between subject-matter and discipline and control becomes understandable because these are two of those duties which teachers must perform. Maybe this finding suggests how teachers have internalized an official expectation.

If at the same time, teachers are found to be less attached to the job, it might be that they are less attached for the precise
reason that they are expected, in teaching, to do what they would not want to do if they had a choice, that is, they would not emphasize discipline and control to the exclusion of student relations. If a pronounced emphasis on student relations is absent in the data, a literal explanation for that observation would be that for the responding teachers, there are other more pressing problems requiring attention than cultivating student relations. One of these pressing problems is the demand of curriculum coverage, which creates a preoccupation with lesson plans, and the need to cover these plans by a certain period of time. All teachers are faced with this demand, regardless of age and sex. To meet the curriculum demands, teachers have to create an effective "classroom ecology" in which learning programmes can be developed, initiated, and maintained for individual and for group achievement.

The management of student behaviour in the classroom (i.e., maintenance of discipline and control), is not dictated by the available techniques of controlling behaviour, but it becomes a necessity in the service of curriculum goals. All teachers are faced with the need to maintain order, a lack of which will be interpreted by the principal, the parents, or the colleagues and students, as incompetence. Just the fear of such an occurrence creates feelings of inadequacy among young teachers who generally come to the school armed with a "new" approach, but they soon discover that the realities of the classroom dictate
something otherwise. Whether man or woman, young or old, a successful teacher is more apt to be one who does not have anxieties owing to discipline problems in the classroom.

Teachers have to utilize the time they spend in the classroom productively. They can do so to the extent that they have learnt the subject-matter to a "criterion of security"; their performance is evaluated by the performance of their students and how effectively they are able to achieve curriculum goals. It can be unsettling for the teachers to be unable to take the students through the lesson plans; any problems arising out of this might expose their insecurity, and in the case of some, their inadequacy. The energy output of teachers through the years in trying to master the materials, can be awesome, especially during the early years of a teaching career. Therefore, if a large proportion of young teachers with low work-attachment places a strong emphasis on student relations (table V.5), but a large proportion of old teachers places a strong emphasis on subject-matter (table V.5), then these two tendencies in the data would indicate how some teachers respond to their various duties in the school. If teaching becomes a routine and a predictable experience, then both the routine and the work experience may have some consequence for the feelings of teachers and for the particular orientation they activate in the classroom.

For instance, on the basis of a few conversations which this researcher had with teachers during the data-collection stage
(some carried on even after), it seems clear that the ways in which teachers responded to questions regarding teaching orientations and their feelings about teaching, are partly related to their length of teaching experience. Older teachers or those with long years of service, admitted that they no longer experienced the enthusiasm and excitement that they once did. However, they did not say that they disliked teaching. For the most part, they felt more competent than in their earlier years, but the expectation of teaching for many more years, reduced their enthusiasm. It is likely that their emphasis on discipline and control or on subject-matter falls within the "routinization of their role"; it is not an indication of their "non-attachment" to teaching. Whether teachers in large districts or in small districts are more likely to become subject to the routinization of their role is a question which can be answered only with further research. Thus, the links between work-attachment and emphasizing a particular teaching orientation tend to become tenuous, and in fact, may be subject to various "imponderables" regarding the situations in which teaching is carried on. In this respect, the remarks of a teacher on the questionnaire used in this research are very instructive: "teaching is not a black and white subject".

A few comments on the teaching orientations themselves are in order here. It was indicated and argued that in the literature on classroom teaching styles, an emphasis on student
relations is designated as a "progressive orientation", subject-matter as a "traditional orientation", and discipline and control as an "authoritarian orientation". These distinctions are conceptual, and they may not predict how teachers are likely to behave in their work-a-day life, nor which one particular orientation they are likely to activate. Maybe these orientations are not as far apart as one might think. Is a teacher being authoritarian when she/he wants silence in the classroom in the service of learning? There is no easy answer to this question and we are unable to provide one. What may be said is that the question of placing a certain emphasis on student relations and a de-emphasis on subject-matter or discipline and control, touches questions on what is "desirable" in public education. Schools which are being run on a "flexible modular system" or on an "individualized instruction programme" - both being recent innovations - show a slant toward a greater frequency of teacher-pupil interaction than is the case of the "chalk-and-talk" schools. It is also possible that the liking of teachers for their job becomes "compartmentalized" as a cognitive experience; therefore, a liking for teaching may not manifest itself in the particular teaching orientation which the teacher activates in the class.

In sum, on a more self-evaluative note, it may be added that the realities of what teachers do in the classroom, how they relate to students, how they make an effort to achieve
curriculum goals, or how they compromise with the conflicting expectations of their role and the competing philosophies of education, stubbornly refuse to conform to this not-too-rigorous theory of teaching orientations. The literature in this respect is scarce and there is none concerning teachers in Canada — to the knowledge of this researcher; hence the exploratory findings cannot as yet be placed in the context of related research.

A further evaluative comment on this aspect of the research as well as on work-attachment and choice variables is provided in the later chapters.
REFERENCES


3. Ibid., p. 90.

Chapter VI

SUMMARY AND CONCLUSION

There were two facets to the analysis with which we were concerned. Firstly, we were concerned with finding out if for working teachers (a) choice of occupation, (b) choice of working conditions, (c) discretion in work is related with their work-attachment. Secondly, we were concerned with investigating whether or not teachers with high work-attachment were more likely to (a) emphasize strongly student relations (and de-emphasize subject-matter and discipline and control) in their teaching practice, and (b) have many personal friends among their colleagues in the same school and other schools.

Corresponding to facet one, we found that when certain demographic (control) variables are included in the analysis, the relationship between choice of occupation and high work-attachment becomes sharper and more exact only for women and young teachers; the relationship between choice of working conditions and work-attachment appears weakly only for women and young teachers, and for teachers located in small school districts; the relationship between discretion in work and work-attachment is noticed only for young teachers and teachers located in small school districts; for large districts this relationship was contrary to our expectations.

(156)
Corresponding to facet two, we observed that (a) women teachers, (b) young teachers, and (c) teachers located in large school districts, with high work-attachment were more likely to have many personal friends in their own school; only women teachers and teachers in large districts showed a weak tendency to have many personal friends in other schools. Furthermore, only old teachers, with high work-attachment were found to emphasize strongly student relations in their teaching practice; the weak evidence concerning a de-emphasis on subject-matter and discipline and control was not conducive to any definite conclusions. One reason for that is the negligible association between work-attachment and a strong emphasis on discipline and control, and between work-attachment and a strong emphasis on subject-matter; these two tendencies in the data are not in the expected direction. Another possible reason could be the personal priorities of teachers themselves as to which particular teaching orientation they would activate with which particular class. The temporal order in which teachers organize their activities and in which they act on their personal priorities is absent in the indices of this research; that this temporal order exists is a possibility that cannot be ruled out. There is also the consideration that teachers have to utilize discipline and control methods in order to achieve
curriculum goals. The way they maintain order in the classroom may not be compatible with their personal priorities or their concept of what is desirable in instructional matters, but their concern with performance might over-ride any other considerations. Thus, a degree of compartmentalization of ideas and actual behaviours is inevitable. In other words, each of the teaching orientations is deeply grounded in the "culture" of the school, if one may use this concept. This post factum observation enables us to understand realistically why the indices of this research were not adequate in bringing to light the empirical differences in the teaching orientations. Notwithstanding the weak evidence on the teaching orientations, our analysis has shown that there are demonstrable linkages between freedom of work-related choices and work-attachment, though the strength of these linkages displayed in the data is open to contention.

Our study is inevitably limited in its scope, and does not address itself to several key aspects of teachers' behaviours in the school organization. For instance, when additional data collected chiefly through conversations with teachers, periodic observations of teachers in the classroom, staff rooms, and staff meetings, and remarks written by the responding teachers on the questionnaire, are brought to bear on the indices of variables of this research, many
clarifications come about in the general argument of this study; and we are inclined to believe that further research would benefit from some extensive item content modifications. This suggestion gains strength when we recollect from Chapter III the evidence showing the gross empirical overlap of the three independent variables on work-related choices (i.e., choice of occupation, choice of working conditions, and discretion in work). What little theoretical breadth may be sacrificed in redefining the key variables of this research seem more than recompensed by their clearer more precise measurement. Since the observations on the relationship between the choice variables and work-attachment under control variables are generally consistent, we are led to believe that the absence of a substantial support lies in the indices or items used, rather than the "idiosyncracies" of a small sample.

It is in the light of this critical perspective that we have provided the next three chapters, and we hope that each one of these chapters is self-explanatory.
Chapter VII

THE STUDY IN CRITICAL RETROSPECT

The data and findings presented in the foregoing chapters are deserving of several levels of explanation. A reexamination of the hypotheses and their interpretations, the observational tests, the measurement of the variables, and the inconclusiveness of the findings constitute the "universe of discourse" in this chapter.

In doing this reexamination, an effort will be made to raise those points which serve to illustrate the problems faced in this research and the mode of data presentation. In the pages that follow, the three "choice" variables, the three teaching orientations, and the teacher-teacher friendships have been discussed. Attachment to the job has been dealt with separately and in some detail in the following chapter.

What cannot be discussed presently is the occurrence of some contaminating influences of the three "choice" variables on each other. And this contamination has been ignored while each one of these variables is examined together with attachment and with the demographic variables.

The tabular mode of analysis which was adopted in this research for reasons of flexibility and direct visual simplicity, is not immune to that shortcoming. It was in Chapter III that the mutual contamination of the "choice" variables was noted from the pattern of their intercorrelation. Nevertheless, this needs to be remembered in order to appreciate the evaluative tone of the discussion that follows.

At the outset, it may be noted that the suggestions appearing in books on research methodology make at least two points regarding "what to do" in research: (1) when research is systematically based upon a body of
existing theory, a genuine contribution in knowledge is more likely to result; and (2) if it is impossible to cover the literature relating to "your" subject, then your hypothesis probably covers too much ground - or perhaps too little, we might add. What happens to the findings if these two conditions are not adequately met is a matter that cannot be settled with a few words.

A specific illustration may be of value. The findings pertaining to the independent variables (choice of occupation, working conditions, and discretion in work) cannot be compared with other researches because comparable studies do not exist. However, wherever possible, a partial comparison of some aspects of this research with others will be instituted. Thus, the respectable convention of comparing results from one study with those of other studies for their possible contribution to the existing knowledge, can be observed but only partially. Furthermore, an evaluation of this research will have to be done by generating some criteria within the arguments of this research. Since these criteria are likely to be subjective, certain limitations of the reexamination concerning the rationale of the hypotheses, conceptualization and measurement of variables, are unavoidable.

The guiding hypothesis of this research was that each of the "choice" variables is associated with attachment positively. The first variable, choice of occupation, deserves elaboration because as a label, it can be misleading. Only one indicator was used to elicit responses to choice of occupation: "whether or not I work as a teacher". This item was designed to elicit a subjective assessment of choice. It was assumed that those who
answered that they had a lot of choice, would indicate a personal sense of freedom. This sense of freedom in turn was presumed to induce, or at least to influence, attachment as measured by a preference for teaching, by valuing success in teaching, and by indentifying with teaching. Thus, the rationale (the implicit sense of gratification involved in the expression of that freedom) was abstracted from the writings on voluntary behaviour, its sources and limitations.

1. Choice of Occupation Reexamined

Does the question, "whether or not I work as a teacher", cover too much ground? Was the meaning of the question implicit in this research conveyed wholly or partly to the respondents? The answer to the first question can come partly from the recorded comments of the respondents indicating their understanding of the question. However, the answer to the second question will come from the pattern of responses of all the cases. It is on the basis of these lines of reasoning that an evaluation of the findings of this research can be undertaken. The first question will be answered by citing some of the comments of the respondents.

One respondent: Don't understand what you want. (checked "much choice")

A second one: Stupid question. (checked "no response")

Another one: Not sure how to interpret. (checked "some choice")

A woman teacher: Unless my husband earns more. (checked "no choice")

Another one: Unless I go back to university for retraining. (checked "no choice")
While each of these responses is open to some interpretation, the last two respondents seem to have understood the "intent" of the question, which was to elicit a sense of constraint owing to the somewhat irreversible nature of the choice that has been made already. (Since the term constraint was regarded as the obverse of freedom in Chapter I, the answers were valid.) A further delineation of the meanings attributed to the research question is not possible because the comments reproduced above are exhaustive. However, in the case of many respondents, we will not know what was in their minds when they recorded their responses. But the point may be conceded that an element of ambiguity lingers in the question the way it was phrased in the questionnaire. This ambiguity is a by-product of the intention to formulate a general question which would elicit a generalized response. Maybe the question turned out to be too specific to be appropriately answered by the generalized categories of "no choice", "some choice", and "much choice". Before evaluating the findings in the light of the above remarks, the response pattern of all the cases needs to be examined.

The data showed the following distribution of the respondents on the question, "whether or not I work as a teacher":

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much choice</td>
<td>41.5%</td>
</tr>
<tr>
<td>Some choice</td>
<td>41.5</td>
</tr>
<tr>
<td>No choice</td>
<td>13.4</td>
</tr>
<tr>
<td>Incomplete</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

If a distinction is made between "choice" and "no choice", then 83% of the respondents fall in one category. However, in the data analysis, the cut-off
point was used near the 50% mark, especially for the 2 x 2 tables. The figure, 83%, indicated that a majority of the respondents had at least "some choice", though the precise meanings which they attributed to the question and to their own responses will not be known. By dichotomizing the values on this item, the sample is divided into those who had "much choice" and those who had "some choice". In a cross-tabulation with the "high" and "low" attachment categories, if the results show a difference of 15 per cent in favour of the combined much-choice and high-attachment categories, then the interpretation is simple, that is, this difference of 15 per cent becomes the measure of the association between the two variables. The decision about the strength of this association can be made in the light of certain conventions (Chapter II); but the decision regarding the strength that this association lends to the argument linking choice of occupation with attachment, is not easy to make.

The dependent variable, attachment, was ordinal too. About 84% of the respondents had attachment scores from low to high; only 16% scored either zero or in the opposite direction. If we just match the two percentages (83 for choice - 84 for attachment), we have an intuitive feeling about the turn which the data are taking. When we rotate the data in a cross-tabulation, how strong are the tendencies in favour of the hypothesis that choice of occupation is associated with attachment positively? It seems that to start with, it is desirable to have an equal number of cases on the two values of either the independent or the dependent variable. This could serve as a good basis for exploring the relationship between the two variables. A much larger sample than the one used in this research could have provided a
different, and perhaps adequate, dispersion of cases on the two values for each of these variables. But the limitations of the available time, material resources, and the high refusal rates all combined to make the sample small. The low association which this research obtained between choice of occupation and attachment, demonstrates at most how these key variables hold together. However, considering the fact that Somers' D is a stringent measure which provides a better "fit" between two ordinal scales, this low association can be regarded as adequate for the purposes of this exploratory research.

The Findings and the Rationale: Summarizing all the findings concerning choice of occupation and attachment while controlling for district size, age, and sex is likely to be laborious. However, some selected findings can be presented here for illustrative purposes.

For both the small and large districts, summary of associations in table IV.4 showed a low association between choice of occupation and work-attachment; the finding is consistent for young teachers; however, for women there was a moderate association. These findings confirm the postulated relation between choice of occupation and work-attachment, but only for a sub-group of respondents. But some tendencies in the data contrary to those expected, dictate a revision of the generalized hypothesis and its rationale.

The rationale for the hypothesis linking choice of occupation and attachment was that a sense of choice concerning occupation promotes a personal sense of adequacy and self-importance, and strengthens self-image. To the extent that this rationale did not recognize explicitly the differences among people according to their spatial distribution, their age, or sex, the original hypothesis becomes reformulated under empirical
tests. Rather than saying that choice of occupation is associated with attachment positively, we can now rephrase this hypothesis a little more precisely: attachment is likely to be high when (a) choice of occupation is high and (b) the school district is large. This hypothesis can be repeated for young teachers and women. This hypothesis will help to identify those characteristics of teachers that are required for further verification. By phrasing the hypothesis this way, an "antecedent variable" (district size, age, or sex) is not left free to vary, but it is included in the statement of the postulated relationship. Since the inclusion of a third variable helps to identify the conditions under which a relation holds, it can have immediate practical value. For instance, it can help to avoid hazardous statements about the relative importance of variables. However, it must be pointed out that a hypothesis of this kind does not attempt to be applicable to a general population, and as such, it is applicable only to some sub-groups within that population. Since the decision concerning the desirability of formulating a general or a specific hypothesis is dependent on the research goals, an exploratory study is flexible enough to recognize the "situational intensification" in relations which are brought to attention by certain antecedent variables.

A further comment on the measurement of choice of occupation is in order here. In this research just one question was asked which under a reconsideration of the research procedures, may not be regarded as adequate, especially when it was couched in rather general, or somewhat ambiguous, phraseology. This inadequacy of having just one item is further compounded by the nature of occupational choice. This choice is a process of compromise
between what is sought and what can be obtained, or more specifically, it is a compromise between private interests and capacities, and the available opportunities. In addition, the margin of choice concerning the occupations is enormous. Both the conception of choice and its scope make it essential that (a) the 'phenomenology' of choice be adequately comprehended and (b) a set of items be used so that if one item proves to be inadequate, another can be relied on. Judged on this latter point, the present research has a shortcoming. It is not an unworthy admission to say that, since just one item was used, the measurement of occupational choice fails to be rigorous. Other indicators reinforcing the one item used, would have intensified the measurement.

The findings tending not to support the postulated relationship between choice of occupation and attachment deserve mention too. For instance, when sex is controlled, the original low association (.15) between choice of occupation and attachment increases to a moderate positive association for women (.32, table IV.4). This finding is very important as it leads toward a reexamination of the postulated relationship. In the absence of this finding for women, trust in the original association will be misplaced. Thus, the introduction of sex as a variable served a very useful purpose in the analysis, that is, it showed how the original association between choice of occupation and attachment is suspect.

2. Choice of Working Conditions Reexamined

The case of the indicators of choice of working conditions represents an improvement over that of choice of occupation. The four indicators which were used can be ranked from high to low in terms of the
percentages of responses:

1. Which subject I teach = 84%
2. Which grade level I teach = 80
3. Which school district I teach = 74
4. Which school I teach = 70

These questions made sense to the respondents, as illustrated from their comments:

One: Had choice originally, but hard to move when on higher pay scale and experience. (Referent is the school district.)

Two: My salary (maximum) is too high for other districts. (Referent is the school district.)

Three: No choice, unless I drop back to elementary school where I started. (Referent is the subject taught.)

These were the only comments we received. However, it is evident that the respondents were able to comprehend the constraints they experienced. From their answers we can be sure that they understood the questions as they were intended to be understood. Perhaps more direct measure of choice concerning working conditions (e.g., number of students they would want to teach, or the ability to refuse to deal with "problem students") can be added to the list. But there is no guarantee that these measures would bring out the relation between variables any stronger than the relation observed already. However, our confidence in the research findings certainly improves if we are reasonably sure of the adequacy of the indicators used for the key variables.

The critical comment on the findings concerning choice of working conditions and attachment and the demographic variables is not likely to
be different from that already made on choice of occupation. The maximum association between choice of working conditions and attachment was .14 (table IV.2) when age is controlled. If a strong relationship were present in the data, it should have come out when other variables like district size and sex were introduced in the analysis. Perhaps the original low association between choice of working conditions and attachment is unalterable. No matter how many variables are introduced in the analysis, the association does not improve. However, since the introduction of the demographic variables in the analysis confirms the original low association, their contribution ought to be acknowledged.

3. Discretion Reexamined

Much of teachers' behaviour is situationally oriented and geared to meeting the many and shifting claims which students, fellow teachers, and administrators make upon them. The loose structuring and the frequently changing facade and content of the teachers' work make it difficult for the researcher to decide which means will ensure a deeper understanding of the teachers' discretionary actions. One way out is to spend enough time in the school watching and talking to teachers; this the present researcher did not do extensively because of the style of the research. But very early in the planning of the research, in trying to form a perspective on the teachers' work, some help was sought from teacher friends, school administrators, and directors of secondary instruction, not to mention the help indirectly obtained by reviewing the relevant literature. The result of all the effort was that about nine items (Chapter II) were selected, albeit arbitrarily, to elicit responses about
the discretionary behaviours of teachers. These items were pretested, and as no apparent shortcomings were observed, the items were included in the final questionnaire. Some minor changes in the wording of the questions did take place but these are of no consequence at this stage of the research.

A critical look at the number of items makes these items look like the every day routine matters, which teachers take for granted as the "givens" of their job, and about which they keep their intimate feelings in abeyance. When they are presented with a list of what they do every day, the chances are that the items are not likely to elicit a "reflective" response. Besides, if the items provide response categories such as "much choice", "some choice", and "no choice", it can be suspected that a "middle-of-the-road" response is selected. And if quite a large number of items is involved, a response-set pattern may develop. It is a possibility that something of this sort did happen. For instance, the item, "experiment with new methods of instruction", elicited as much as 99% response for the combined categories of "much choice" and "some choice". Was this item measuring teachers' discretion? How is it that individual variations in the responses do not emerge? The absence of individual differences could be the reason that some respondents scored 1.00 on the discretion index. Maybe the respondents developed a "reactive bias" that depressed their tendency to select the precise category they would have chosen on reflection. This can happen in survey research, especially when it relies heavily on structured questions with fixed-choice categories. However, the "amount" of reactive bias that invalidates the responses, cannot be determined. As such, only clarifications can be introduced by including information that is gathered without the direct
involvement of the respondents.

It is worthwhile to note that it is precisely the measurement of variation which makes a measuring instrument interesting. The homogeneity of the responses must be responsible for bringing out low and negligible associations when the items on discretion were correlated with the summative index of attachment (Chapter III).

There is some contamination involved in the measurement of discretion. This contamination is the result of the presence of items on attachment in the same questionnaire. It is well recognized that teachers have a certain flexibility in the ways in which they make the tactical decisions about their work, and they enjoy that flexibility. Assuming that teachers are fairly "satisfied" with their work, they are likely to impute certain meanings to the items they see, and they may not care to ponder about what the items imply. Their unfamiliarity with the subject-matter of the questionnaire may produce uncertainty about which answer to select. Stated differently, the emergence of an "acquiescent response" among the respondents is uncontrollable. As a result of that they begin to endorse the agree categories and disregard other categories provided. And if some corrective steps are not taken, the research findings can become strongly suspect. It would be a fascinating study in itself, if it could be done, just to find out the seriousness with which the questions were answered.

We should, however, hasten to add that certain research procedures were adopted to mitigate the effects of a response-set. For instance, this researcher was usually present in the school at the time the questionnaires were distributed. He talked to teachers frequently, or
when he was approached by teachers themselves. He had enough opportunities to answer teachers' questions regarding the questionnaire items. But these exchanges were not as extensive as this researcher had hoped. It should be noted, however, that these remarks are not a criticism of teachers' involvement in this research, but these remarks are concerned with the issue of the fallibility of the questionnaire as a measuring instrument. The questions were deemed to be self-explanatory, and the presence or absence of the researcher on the site of research is immaterial to the completion of the questionnaire.

The point of the matter is that the discretion items fall somewhat short of eliciting differentials in responses which, if elicited, can make the instrument an efficient one. We have no reasons to believe that the responses recorded on the questionnaire are misleading; however, the homogeneity of these responses is a matter that should not have gone unattended.

Some findings deserve to be reviewed here. The highest degree of association between discretion and attachment was obtained (.20, table IV.3) when district size is controlled. This association is low and is not adequate by any means. Presently, it has "prolonged the life" of the hypothesis that discretion is associated with attachment positively. Most of the findings emerging from the tabular analysis are not very different from the findings on choice of occupation and working conditions, simply because we are rotating the same data over and over again.

It may be pointed out that some alternative measures of discretion were not included in the questionnaire, partly because it was hoped that
the items already provided would work, and partly because the instrument was not to be made a lengthy one. Alternative measures like asking teachers to indicate the average "number" of times in a week they have to meet chance, unanticipated happenings and the "precise" ways in which they meet them, can be useful measures of their discretion in work. These items can be supplemented by asking teachers to indicate the "per cent" of their training, expertise, and skills, which come into play as they go about their work in the schools. Since the exercise of discretion is the outcome of teachers' skills, competencies, and expertise, such other indicators would serve to measure discretion stringently. These indicators would also measure the "extent" to which teachers do exercise discretion.

4. Teaching Orientations Reexamined

The argument separating the three teaching orientations (emphasis on student relations, subject-matter, and discipline and control) is a theoretical one. It has already been stated that the intention was to find out if a strong emphasis on one was compatible with a weak or no emphasis on the others. Each of these orientations was understood to represent a teaching style about which information needs to be collected. It is a defensible argument that one teaching style is different from the others in its focus. But, somehow this argument is not exhaustive because it fails to take into account the diversity in the students, with whom the teachers deal. For instance, a teacher emphasizes subject-matter with one class, maybe because he/she feels it is in the interest of the students. But the next hour, a new class comes, and the teacher
is pleased to give teaching a personal touch just because he/she likes the kids - it is a perfectly normal behaviour for teachers to like some classes more than they like others. Still another class is met during the day and the teacher becomes a disciplinarian. The different adjustments which teachers have to make from one class to the next are by their content tactical and they may not be easily "captured" by a few general questions.

Stated differently, teachers make critical choices about the sequence, duration, and tempo of the communication of knowledge. Their teaching styles constitute vocabularies of motives which will dictate the broad preferences for the bases on which knowledge is to be transmitted. It is conceivable that teachers would be sensitive to the manner they adopt in transmitting knowledge, and they would regard the manners which are not in line with their personal preferences with indifference. Thus, the search for a distinct teaching orientation among the several present is a compelling one. If it is found to exist, it would enhance our understanding of the ways which facilitate the transfer of knowledge to pupils.

As a strategy of measurement, if teachers are stratified according to the number of classes they teach, and each class is made the referent for the measurement of their teaching style, and then perhaps a "prepotent" teaching style can be understood - a style which is frequently adopted by the teachers concerned. It should be apparent from this suggestion that a fairly elaborate and exclusive research design would have to be developed to accomplish this task. And such a design could not be included
in the present one owing to other pressing tasks. However, it is a possibility that with an elaborate research design, the findings on the three teaching orientations would be strikingly different from those of the present research.

A few comments on the measurement of the three teaching orientations must be made. The way in which questions about them were phrased contained an element of loadedness. That loadedness was experienced by the responding teachers, as the following comments by them illustrate:

One teacher, about subject-matter:
Depends upon the course and the students in the course.

Another, on discipline:
What type—self or teacher oriented.

Some general observations by another:
Teaching is not a black and white subject. Each student is different. Each group of students is different.

This teacher could have been reminded, in a face-to-face interaction, that the difference among students was not under dispute. Perhaps the same teacher would then have supplied an illuminating answer if the questions were explicitly stated to him.

The specific findings on the relation between attachment and an emphasis on student relations deserve to be reexamined. The data have shown that the associations between attachment and an emphasis on student relations are negligible or low even when the demographic variables, age and sex, are controlled. Thus the data have consistently failed to support the postulated relationship between attachment and an emphasis on student relations.

However, the findings, both for women and men, can be examined in
the light of some existing research. For instance, it has been argued by Goldsen et al., that men are quite happy to be working with things rather than people; women are more concerned with self-expression and want to work with people and be helpful to others. If this were the case, some evidence would have emerged from the present research. For example, it could be expected that men teachers will de-emphasize student relations and cultivate impersonality in their work by emphasizing subject-matter or discipline and control. It could also be expected that women teachers would strongly emphasize student relations because it is in keeping with their preferences in work. The findings of this research do not support this sort of reasoning. This research did not show any notable differences between men and women with regard to their emphasis on student relations, subject-matter, or discipline and control.

In another research study, Davis has observed that both sex and patterns of interest provide a good prediction of occupational choice. Among the cases that he studied, 70 per cent of the women with "service" interests chose teaching, compared with 5 per cent of the men who were oriented toward money. If women's preferences for a service oriented job were a stable tendency, it might have shown in the data of this research. In their case, a stronger emphasis on student relations should have emerged which, at the same time, would have been an indication of their attachment to teaching - a job that certainly provides opportunities for service to others.

In sum, several variables have been considered in this research, but still there are no indications that individual differences between men
and women teachers are subject to a generalization. The task of providing some conclusive evidence should better be left to some future undertaking.

5. Collegial Interaction

Interpersonal relations among teachers is an important area of research. The brief venture made into this area by this researcher was the outcome of several visits to various schools prior to the research undertaking. Staff-rooms were observed in which the teachers were eating, reading newspaper and making occasional comments on the "Canucks"; as such these comments were usually one-way. There were other staff-rooms in which verbal exchanges were the norm, and teachers created the impression as if they knew each other well. There were other staff-rooms which were found almost empty even during the lunch hours. These myriad scenes roused the interest of this researcher to the effect that an attempt was made to look into the differential modes of interaction by using some theoretical arguments. These were the supposition that the differential interaction among teachers may be the result of their dissatisfaction with teaching. The basic argument was simple and not very rigorous that association with others is a sensate, existential experience which is not resistant to a theoretical explanation.

In other words, teachers are not "physically" alone when they are at work in schools. If they want to withdraw to the private and personal spheres of "self", there might be a social basis responsible for that withdrawal. To the extent that the formation of friendships with others is voluntary and the desire for friendships individualistic, the need is there to take up these matters empirically, and to attempt to
understand the formation of friendships by invoking an empirically verifiable proposition. Ours was of this kind even though it does not seem to have worked very satisfactorily. We observed earlier (Chapter V) that for larger districts, the evidence of friendships among teachers in the same school was noticeably different than the one observed for the smaller districts. For larger districts, the association between attachment and having friends in the same school was supported by the data (table V.1). One explanation for that association is the fact that large districts contain large schools which are organized round departments for various subjects. These departments are a monocratic organization, i.e., they bring together like-professionals. Teachers belonging to such departments have a large say in determining policies related to the subjects they teach. (In one big school, this researcher found that the teachers in certain departments could determine the nature of discipline they wanted to enforce among the students.) As teachers in the same department work together, their cooperation with each other stimulates and heightens their interaction. It is understandable that they tend to have friendships in the same school. Since they are busy with work most of the time, their friendships with teachers elsewhere are limited; that is why the data have shown little support for friendships extending beyond the school in which teachers work.

In smaller districts, with fewer schools, and a relative degree of isolation from the big urban centres, the opportunities for teachers to be friends with colleagues are different than for their counterparts in larger, urban districts. The data showed a negligible association between
their attachment and their tendency to have friends in the same school; the association concerning friendships in other schools was low and negative (table V.1). It is not possible to delineate all the qualitative differences between the friendships of teachers and the special circumstances that promote friendships among them. However, we should qualify the statements about friendships with teachers elsewhere. In this research we did not specify if those other teacher friends were in the same district or elsewhere. We were not interested in the exact locale of these friends. We were interested in finding out if the circle of friendships among teachers extended beyond their own school and if these friendships were the result of their liking for teaching. And the data presented in Chapter V have shown that there is a tendency among the teachers in larger school districts to that effect. Thus, the postulated relationship between attachment and having friends among teachers in the same school and other schools is supported but for nearly one-half of the sample or the subsample of women alone.

We need to make another qualification. We have measured friendships among teachers and not just "knowing" other teachers or just getting together with them. There is a qualitative difference between the meanings of these words. Friendships involve knowing the number of teachers with whom one shares confidences and discusses matters not related with the work of the school. Getting together with other teachers in the staff meetings, or "socials" is a different matter.

The measurement of friendships done in this research is quite stringent and this needs to be remembered for a proper appreciation of the findings.
6. The Teacher Population

One should not forget how diverse classroom teachers are as a group. They vary in several dimensions, e.g., the grade level they teach, the subject they teach, length of teaching experience and training, formal degrees and certificates they possess, background, and even "idiosyncracies", if one may be permitted to be a little petulant. (This researcher is not insensitive to their problems, though.) This diversity is likely to show in their teaching practices, behaviours, and attitudes or whatever we wish to study about them.

The intention of this research was not to study that diversity. If teachers' diversity were the focus, the research design would be a different one. The present research was exploratory, and the exploratory rationale resulted in developing a questionnaire that was addressed to a certain homogeneity among teachers. However, the point needs to be emphasized that teachers' diversity can be a useful tool in data analysis. The sample can be stratified into sub-groups and aspects of teachers' responses to the items of the questionnaire can be studied. As the present sample was small, not much could be accomplished in the analysis. About 224 cases, teaching from grades VIII to XII, some teaching at both the junior and senior secondary levels, are not enough for division into sub-groups which would be meaningful for cross-tabulations. Hence, some of the inconclusiveness of the findings is attributable to the smallness of the sample because it did not permit the use of certain viable analytical strategies.

Some general observations which have been made on teachers as
research subjects may be considered in passing. For instance, Trow has stated that teachers are difficult subjects for the survey researcher. Many of them, by virtue of their profession, mistrust survey research and the ways in which it gathers data. They resent structured questionnaires about complicated issues, presenting forced choices among limited alternatives. They do not want to be studied through methods that appear to them mechanical and stereotyped. In the experience of this researcher, teachers were generally cooperative, once he had broken through the administrative red-tape and approached the teachers for the research. However, he found that there were some reticent teachers, even though they had willingly accepted the questionnaire. As to their reactions to this research, it is difficult to formulate any definite opinions. Some of their comments have been recorded below, and these provide a measure of support to the foregoing observations. But their comments also accent individual differences among them.

7. Let the Respondents Speak!

We wish to cap the general self-evaluative tone of this chapter with comments from teachers which they recorded on the questionnaire. They serve to illustrate the predicaments of both the researcher and the respondents themselves.

Your survey questions need considerably more refinement before the above answers (mine) will really reflect my attitude.

I feel I have not given you any information by completing this. The answers all depend upon my personality, my students, and my personal teaching none of which can be measured by this sort of survey.
I hope you do not pretend to now know what's going on. These questions are too value packed and don't allow for individual circumstances.

Possibly my answers may not be significant to your consensus, due to the fact that I am in the fortunate position of teaching because I want to not because I have to.

Please note the subject that I teach when you consider my answers on page 2. (teaching orientations)

Not much room for shades of black and white in some of the questions.

This questionnaire is too ambiguous and vague.

But does checking squares tell the whole story? Do I interpret the word "choice" as you do?

Good luck to you and your project. It won't change the world.

Rather pointless.

(A personal sense of modesty forbids this researcher to reproduce the "laudatory" comments.)
REFERENCES


3. Ibid., p. 100.


5. Ibid., p. 19.


Has attachment been adequately studied on the basis of teachers' responses to the questionnaire items? And have the research procedures provided an adequate answer to the question raised earlier - "why do people engage in their occupations continuously and consistently"? An examination of what became known through observation, conversations with teachers, and the critical remarks by teachers to the questionnaire items together indicate that a second look ought to be given to the measurement of attachment. This revision entails essentially two tasks: (1) a delineation of the larger context of work attachment research, from which this study derives its justification and intelligibility; and (2) a presentation of additional observational data which serve to enlarge and improve the picture of attachment developed from the measures used in this research. Since these observational data were gathered independent of the cooperation of teachers, it is believed that they will greatly reduce the uncertainty of interpretation of attachment findings. Stated differently, these data will provide a "reliability check" on the conception and measurement of attachment, and consequently, will provide clues that may be used in future research on teachers' attachment to the job.

1. The Larger Context of Attachment

The larger context of job attachment studies is quite disparate. Making sense of that disparateness is a laborious task which cannot be accomplished adequately in the present research. This disparateness has resulted partly because of the ways in which job-attachment has been theorized. As a sensate
existential phenomenon, attachment to the job is not resistant to theoretical explanations which can be different from one another in their focus.

Many studies on job attachment and related concepts have already been mentioned; many more of equal merit might have been referred to with equal pertinence. But the studies mentioned were intended to be illustrative rather than inclusive. One may say that major issues and research approaches have been delineated. However, an extended interest in the field suggests that a few more of these studies may be mentioned to view in detail the important contribution that some of them have made. The studies under reference are those which attempted to focus on work itself in order to assess attachment to the job. Though their focus has not been very pronounced, but as it was one of the points of departure for these studies, it needs to be mentioned.

The early surveys carried out by Hoppock\(^2\) approached the study of attachment with the easiest way out: by asking people to what extent they are satisfied with their work. Another approach in studying attachment has employed the "free response" method of asking people to write essays about what they like in their jobs.\(^3\) The studies of Herzberg \textit{et al.},\(^4\) employed the critical "incident" approach. The latter studies need to be singled out because they are theoretically more sophisticated than the others. Herzberg and his colleagues carried out a number of surveys in which engineers and accountants were asked to describe occasions when they had felt "exceptionally good" or "exceptionally bad" about their jobs. Through the analysis of the responses obtained, it was found that achievement,
recognition, the work itself, responsibility and advancement brought about good experiences. And supervision, company policy, fellow workers and working conditions brought about bad experiences. Their theory, now labelled as a "two-factor theory", had concluded that "motivating" factors (achievement, etc.) affect satisfaction, while "hygiene" factors (supervision, etc.) affect dissatisfaction. However, other researchers employing the same theory have obtained rather different results.

It is possible that these inconsistent results were obtained because the theory elicits biased replies from the respondents or because the researchers themselves introduce biases in coding the responses. It is also possible that satisfaction is not the opposite of dissatisfaction as these researchers imply. Again, it is possible that the sources of satisfaction are not independent of the sources of dissatisfaction, and the inconsistent results are obtained because of an inadequate conceptualization of attachment.

The foregoing researches mention satisfaction with work itself but they fail to treat it with methodological rigour. For instance, in order to form an adequate theoretical perspective, it is worthwhile to delineate the bases of satisfaction with work itself: people get attached to the work itself because they are expected to keep their work life stable; people get attached to work itself because they come to be identified with what they do; and people get attached to the work itself because they prefer to engage in it rather than engage in something else. These bases of attachment with the work itself point to something different than the answer which is conventionally given, i.e., people get attached to the
work itself because it provides a measure of their latent potentialities or capacities.

In addition, as a strategy of measurement of attachment, it is worthwhile to remember that by employing measures to which the respondents are "blind", their biases in responses can be greatly reduced. In other words, it is essential that adequate attention be given not only to the ways in which conceptualization of attachment proceeds, but also that steps be undertaken which help to refine this conceptualization. Adequate conceptualization is a task that is accomplished primarily in the beginning of a research undertaking, but refinement is a task that can continue to occur even when the data are being collected. It is during this latter stage that observational data can be collected which, later on, can be quite useful in interpreting the results. Both of these tasks have been further elucidated in the discussion that follows.

The explicit concern of this research was to study and to establish linkages between choice of occupation, choice of working conditions, and discretion in work and work-attachment. The data gave weak support to the relationship between these variables; however, when certain control variables were introduced in the analysis, the relationship between choice of occupation and work-attachment was moderate for women and in the expected direction; it was weak for young teachers even though the size of the correlation showed an increase of ten correlation points over the original correlation of .15. However, district size, age, and sex seemed not to have any noticeable effect on the relationship between choice of working conditions, discretion in work and work-attachment. In some respects it was possible to suggest which of the
"choice" variables, or which of the demographic variables had a greater effect on attachment separate from the others.

In this mode of analysis, the theoretical affinities with researches done on job satisfaction, job involvement, work attachment, and occupational involvement are obvious. What this research chiefly shares with the earlier work is the conception of attachment as an emotional bond which results if certain conditions exist for individual need satisfaction or for integration within the employing organizations. What this research does not share with other studies is the analytical distinction between attachment to the job per se, and attachment as reflected through the set of relationships which a job entails. This analytical distinction was accented by delineating the three dimensions of attachment: preference for the job, valuing success in one's job, and identification with the job. These three dimensions derive their rationale from the societal context which recognizes the fact that people live in society and in relationships with others. And people's conception of what is desirable in life is derivable in part from the generalized conceptions prevalent in the society in which they live. In other words, the conception of attachment as an emotional bond was given a sociological bias rather than a psychological one which is concerned solely with personal evaluations or attitudes.

To measure attachment, six indicators employed in this study were intercorrelated (Chapter II) in order to provide a basis for combining them in an index of work-attachment. If an element of imprecision entered the measurement process, it would be a point which is incontestable.

Presently, it can be suggested that a search for more convincing measures of concepts is an on-going activity. And this search measurably
improves as more insights are gained through empirical investigation and evaluated in light of insights which already exist. Perhaps, one can add that the only stability belongs to the process of inquiry itself rather than to a set of indicators.

2. Attachment: Reconsideration and Enlargement

What became known through observation, conversations with teachers, and their remarks on the questionnaire items suggests that in between attachment to the job or dissatisfaction with it, there can be a gray neutral response - the job is a role which one performs, among others, during the course of a single day. This gray neutral response, in more expressive terms, might be called "adaptation" to the job requirements. It implies that the features of work and work environment become so well known to people that they find it difficult to think of them as something deserving of special attention or curiosity. Alluding to the presence or absence of any external conditions (e.g., freedoms or constraints) which may or may not induce attachment, provides a starting point for an inquiry directed at determining which two variables in the job environment hold together - it is this kind of inquiry which constituted the essential "sociological task" in this research.

However, adaptation to job requirements is not "non-attachment", but a process of coming to terms with the "givens" of the job and its environment. The psychological and social requirements of people who work, and their emotional bonds become boundary conditions to their performance. It may be mentioned, that the operational specifications of the social
and psychological requirements of people for a particular kind of work environment are not easy to make. But if they are met by work itself or by the work environment, it would probably show in their performance on the job or might even enhance the quality of their work life. If, however, these requirements are not met, it is likely that most people would continue to perform at a level which is acceptable to their employing organizations. And this performance level, if maintained, enables them to survive occupationally and without loss of face. How pervasive this kind of adaptation to the job is or how pervasive it can be, is a question which cannot be answered by the present inquiry. Suffice it to say, that this mode of thinking about jobs can provide insights into work experiences which otherwise would be left out if one consistently looked at these work experiences through the emotional bonds of people or through the subjective evaluations of people. Any indications of a neutral or a non-committal attitude towards the job are not necessarily evidence of non-adaptation, but these indications should lead one to look analytically at the structure of jobs and how they are done. It is through studying this job performance that the extent to which attachment and/or adaptation exists, would become known.

To substantiate this viewpoint, certain features of the teachers' job need to be discussed in some detail. And in so doing, we can consider only a few aspects of their job, and these aspects have been deliberately chosen to illustrate the general and obvious point that their job and its social milieu are not easily matched by other kinds of jobs. Therefore, it follows that a study of teachers' attachment to the job is not easily
comparable with studies of attachment to the job which are unlike teaching in major respects.

**Classroom Behaviour:** Interpersonal exchanges are endemic and they occur between teachers and students all the time. These exchanges can be quite extensive. For instance, the classroom of an art teacher that this researcher visited looked almost chaotic during the first ten minutes. As the teacher entered, there were ten students with different demands: one required supervision; some required evaluation and direction of tasks already assigned to them; one or two were requesting stationery items; and the others wanted permission to leave the classroom. Also, some memos which required the teacher's attention, were sitting on the table. It was not by any means a typical day of a typical class hour. But handling two subjects, two grade levels, with 50-60 students, five days a week, forty weeks in a year implies some adaptive ability on the part of the teacher, no matter what his/her feelings are about the job. What personal qualities enable teachers to withstand the demands of a classroom, is a matter which needs to be taken into consideration in measuring teachers' attachment to the job. And this is a matter which is understandable through extensive observation and not through structured questions alone.

In addition, the content and sequence of the interchanges between the teachers and students cannot be planned with any exactitude. Yet teachers cope with these and make discretionary decisions in meeting students' demands in the classroom. Whether or not this particular aspect can be included in assessing teachers' attachment to the job, will depend on what other indicators are being used, and how confident the researcher is about the adequacy of those indicators.
For teachers, their continuous contact with students constitutes a special source of satisfaction. The following comments by three teachers are illuminating.

An Art Teacher:

Teaching is a war of attrition - a battle you have to fight everyday. Not in the sense of a war but, even in the least job, one would get bored or tired. After 2000 lessons, how motivated can a human being act. Still, all in all, I enjoy teaching.

A Science Teacher:

I find that teaching has become more exhausting. There are many more pressures now than there used to be. I think that working with youth is most rewarding.

A Social Studies Teacher:

A rewarding career, but I find I spend an average of fifty-five hours on school activities.

While in the classroom, there are other sources of teacher satisfaction, e.g., some of them convey a sense of personal usefulness in helping the students to develop, in teaching them something different from one week to the next. Some teachers watch the faces of their students to see if they have the "light" of understanding - the use of metaphor and simile is not uncommon among teachers. It follows, therefore, that indicators of attachment like preference for teaching, success in teaching, and identification with teaching, can be supplemented with those indicators which suggest teachers' adaptation to the demands of their classrooms.

Supervision: Quite a few teachers in one of the school districts which I visited reported that they were not closely supervised, and whether or
not they will work on their job is left to them. In other words, they could close their door and "be" in their classrooms. They had a good feeling about their work in that the district administration did not act as a watchdog over them all the time.

One implication (and not a generalization by any means) of this aspect of teachers' satisfaction is that teachers get to know and internalize, to a certain extent, the expectations of their immediate administrators and the school board. They tend to avoid those behaviors which would endanger their reputation and the reputation of their schools. Any limitations which are placed on them through district policy are accepted as part of the prevalent educational conditions. Most of their attention revolves around the particular group of students with whom they work and with the specific details of the classroom work. In doing this work, they have to cooperate, if not completely agree, with administrative actions initiated by the school administrators in the school and in the school district. Indications of non-cooperation are likely to work against the teachers' professional self-image, hence, their dissatisfaction with the administration may not manifest itself in their indifference with the job they do.

**Job Requisites:** Teaching requires a certain discipline on the job and an acceptance of individual responsibility for job performance. The school board retains the right to renew the contract of teachers. The "costs" of failure to meet job requirements are heavy. This pressure, complemented by support from fellow teachers, internalization of the code of ethics, and expectations of their administrators, all enable the
teachers to determine in part the quality of their performance themselves. At present we do not know the quality of performance required from teachers, hence a further refinement of this aspect of teachers' behaviour is not possible. However, since teachers are left to determine their own performance level, they do what their "security" needs suggest them to do, i.e., perform at a level that ensures continuous employment.

A recent study of teacher demand and supply in the province of British Columbia has revealed that qualified professional teachers prefer to stay in rich, urban, and climatically agreeable districts.\(^7\) (The school districts from which the data for the present research were collected fall within these criteria in relative terms.) By implication, we might suggest that teachers in the "good" districts "have it made"; they have got their tenure, and they will continue to perform at a level which is acceptable to their district administration. Such performance by teachers, though not substantiable here, is an indication of adaptation on practical grounds. They may remain neutral or non-committal to such indicators of attachment as preference for teaching, identification with teaching or valuing success in teaching. If, however, theoretical reasoning suggests that 'preference', 'identification', and 'success' are viable concepts for studying attachment, then the inquiry can be directed towards asking teachers whether or not they are satisfied with their teaching assignment during the current year, and whether or not they would like to have the same teaching assignment over the next academic year. This mode of inquiry would put certain temporal boundaries on attachment and enable us to assess its fluctuations;
otherwise we might assume, unrealistically of course, that attachment
is a stabilized, if not a static experience.

The Zeigarnik Effect: 8 For several decades now, psychologists have
talked about a psychological phenomenon called the Zeigarnik effect,
named after its discoverer, which stresses that the human psyche has a
low tolerance for incompleteness. (This perhaps would explain some of
the dissatisfaction which industrial workers experience under extreme
conditions of job fragmentation.) We resist being interrupted and have
a strong desire to finish what we are doing. This could be true;
assuming that we have control over what we are doing. To illustrate,
when a teacher is teaching a subject, he/she teaches it continuously, once
the initial outline has been worked out in the light of the curriculum
guide. Lessons left unfinished today can be completed tomorrow or the
day after, or from week to week till the end of the year. The extent
of teachers' control over work in the classroom is tight; the scope
of control within the classroom of the subject taught and student
behaviours is extensive; and the amount of discretion exercised in
handling interpersonal exchanges with students is considerable, if one
takes into account such refinements of teachers' work. Since teachers' jobs
are not fragmented, this might have an indirect influence on their
job satisfaction - a consideration which cannot be ruled out.

Another related issue: Which one area of work do teachers regard
with priority? Is it classroom instruction, paper-work, or extra-
curricular activities? If there was one such area, it would be possible
to concentrate on that to elicit teachers' responses to that area and
then to determine their attachment. At present we do not know if there is one task which teachers regard as important.

An English teacher had remarked:

Outside from minor hassles or paper-work, etc., I can think of no job which is as rewarding (although somewhat frustrating at times - because of my own inexperience and inadequacy) than teaching.

Another English teacher had remarked:

Marking and paper-work, registers etc., make teaching less enjoyable. One is never free from one or the other.

The point of the matter is that teachers' responsibilities involve not only instruction but also management of the physical environment of the class, and related administrative matters. Their feelings about teaching cannot be separated from their feelings about non-teaching matters. The scope of control over non-teaching matters is wide and does not rest with teachers. Their education and experience might enhance their competence in the subjects they teach, which in turn might entitle them to determine more and more what ought to be taught in the classroom. But by the same token, they resemble an "encapsulated man", who, as a practical matter, must forbid himself from thinking in an area where only other specialists can think because they have the data. If teachers are tempted to extend the exercise of discretion in those areas which are outside the definition of their job, and their formal training, the consequences of their actions for the employing organization might be intolerable.

Teachers at the secondary level are mostly subject-area specialists.
They can raise their expectations about control over what they teach but they could not control, at least to the same degree, the overall goals of school education which, in practice, are determined by various administrative levels. Their discretion would be operative within the broad goals set down by their employing districts and it would pertain to those matters which teachers themselves will handle. In this sense, teachers' discretion over instructional matters needs to be viewed analytically and realistically. Any gains which teachers make in controlling instructional matters is balanced by their adaptation to certain policy matters initiated by the school administration. Their verbal affirmation of their satisfaction with teaching matters and dissatisfaction with non-teaching matters need not be equated with their abiding commitment to teaching as a career. A refinement needs to be introduced in working out the specific areas which teachers regard as their "rightful role". Given the diversity of tasks which teachers are expected to perform as part of their teaching job, the global indicators of preference for teaching, identification with teaching, and success in teaching somewhat cloak the nature of teachers' responses. Only observational data can help to supplement the understanding of attachment that is gained through structured questions. Some evidence which this researcher collected, suggests that the administrative constraints which the teachers experienced did not create the effect which would be attributable to them, one of dissatisfaction with teaching, but rather the teachers adapted to those constraints in a manner that did not hamper their work in the classroom.
Staff Decisions: The seven schools which this researcher visited during data collection, were different according to the number of meetings they had. For schools, it is mandatory to have at least one staff meeting during the year. However, meetings are arranged whenever the necessity arises, and they can be as frequent as once a month. The matters which are discussed in these meetings can vary in importance, and this researcher has no means of assessing that importance. However, the sense of participation which teachers have is not determinable because it was not the focus of this research. But this could be an important aspect of teachers' overall satisfaction with the internal organization of the school.

Among the schools visited, larger schools were divided into departments, with a senior teacher acting as the head. The department as a whole was responsible for instructional matters, discipline, and the conduct of the courses, as long as the department remained within the boundaries permitted by the curriculum guide and the administrative policy set down for the whole district. (The relationship between departments and the principal's office can vary from one school to the next.) In one school, the teachers were pleased about the relative working autonomy they had over the curriculum.

In addition to participation in decision making in the school, teachers have local and provincial associations which attempt to influence policies through collective representation. Any existing reduction in teachers' influential participation in decision making is offset by their "hope" that gradual gains can be obtained through collective effort.
The extent to which teachers participate in decision making is related to whether or not the school in which they work has become thoroughly routinized, or perhaps their participation is related to the frequency with which important decisions have to be made. The goals of education are broad. Matters related with curriculum are decided before the school term starts. And the assignment of duties to teachers is allocated before the term starts; hence any decisions which are made later during the year are made within the broad policies already agreed on. So perhaps important decisions are not made often enough to be a consideration relevant for teachers' participation in them, unless the study were undertaken at a time when those decisions were being made. Maybe a fair amount of teachers' work has become routinized; the non-routinized aspects are not visible enough once the school term has started. However, for any meaningful conclusion regarding this aspect of teachers' work, more evidence is needed. Some of the schools which this researcher visited, did have procedures worked out for most of the work to be handled from week to week. And the way the staff meetings were arranged, he found that the teachers were generally satisfied with them.

Participation in decision making indicates some control, and the existence of control contributes to satisfaction, as Blauner has noted. In the case of teachers, the satisfaction measured through indicators like preference for teaching, identification with teaching, and valuing success in teaching can perhaps be augmented by indicators like participation in decision making. But it ought to be remembered, that even this augmentation may not strengthen our conclusions, because not
all teachers participate in these meetings with equal zest. However, teachers' participation in the decision-making processes in itself, is an interesting area of inquiry deserving of a separate study; but it can reveal quite a lot as to how they feel about their participation in the working of the school.

3. Some Alternative Measures

From some of the recognizable features of their job, and the nature of their performance, it seems that teachers respond to practical considerations more often than can be anticipated in a theoretical argument. Their adaptation to the requirements of their jobs, seems to suggest that a realistic assessment of teachers' attachment needs to be refined in two ways: (1) by enlarging the number of indicators, and (2) by focussing on those processes by which teachers meet the requirements of their job, in addition to those indicators which focus on their "feeling states". Teachers' adaptation to their role requirements, when coupled with the presence of positive affective responses, could be labelled as job involvement (synonymous with the present usage of the phrase); and when coupled with a negative affective response, it could be labelled as "alienation". In addition, the concept "adaptation" permits the study of attachment to the job without defining attachment in "feeling states" of individuals.

Some indicators of attachment used in this research require a critical comment. For example, the item "whether or not teachers would like to have one of their children in teaching" was misinterpreted. In the case of miners who have been reported to say that they would not have
any of their children in mining, this item is likely to elicit a clearly positive or negative response depending upon how the miners are disposed toward their job. But consider the following remarks by some teachers to this particular item:

I have no intention of influencing my children's life decisions.

Depends on what kind of people they turn out to be, who knows.

Have no children.

It is up to them.

As they are young I have not had time to observe the necessary qualities that I consider necessary for a teacher.

If they feel they can handle it.

Would agree if it were their choice.

I couldn't really care ...

While each of these responses is open to interpretation on an individual basis, the item raises certain doubts about its proper place amidst other items. Besides these remarks, about 52% of the respondents chose the "uncertain" response category to this item, which does not lend any strength to other items. Because of the many-faceted responses that this item elicited and the low contribution that it makes to other items, this item cannot be regarded as a very satisfactory indicator of attachment to the job.

Another point pertains to the teachers' self-assessments of their own work. This self-assessment can give some indication of their attachment to the job. Consider the following two remarks by teachers:
Teaching is a highly under-rated profession.

Once teachers realize how much freedom they have - if they choose to exercise it - they cease to complain and will certainly enjoy working with students who are always new and challenging.

One could argue that such a self-assessment might be an exaggeration in their own favour. The prestige which the society at large accords to an occupational category may not correspond to this category's self-assessment. However, the matter is empirically verifiable. In the case of teachers, a recent study has reported that among high school students, parents, and school trustees, the predominant image of the teacher appears to be that of a highly respected member of the community, a competent and skilled professional engaged in hard and demanding work. This study further reported that interestingly enough, teachers tend to under-rate their support and even accomplishments. Thus, it seems possible to devise a subtractive model of teachers' attachment to the job, that is, by working out the discrepancy between teachers' self-assessment and the assessment of significant groups in the community, of how they regard teaching as an occupation. This model may not replace other indicators of attachment, but it could be used in conjunction with them, if resources were available for introducing such additions to the measurement. If we say that we deepen our understanding to the extent that we sharpen the indices for concepts, or enlarge these indices, then there is no way of ensuring that the "gain" in understanding is likely to be equal to the "complexity" of the measurement. But it can certainly enhance our confidence in the way in which the inquiry is conducted - because the alternatives have been considered.
Another point may be made regarding the question of an individual's identity with the occupational role. The argument is tenable that, since a substantial part of people's lives is spent in occupational activities, the work-roles serve to link people with others through interaction, and thereby form the basis of people's sense of personal identity. If a question relating to personal identity with one's occupation does not elicit from the respondents an appropriate response, it is likely that the researcher's level of abstraction remains unmatched by those of his respondents. Consider the following two comments by teachers:

Sometimes - depends on who, and where I am.
Sometimes I'm ashamed of the blatant incompetence of my colleagues.

The relationship with my family is equally rewarding.

Another teacher does not like to be identified as a teacher in private life. And yet all the three teachers have been teaching for several years, and perhaps will continue to teach, but their responses do not indicate a sense of identity with teaching even though they have been teaching every year. Could it be that they are attached to teaching despite their reluctance to identify with the teaching role? The answer to this question is not available in light of the data presented so far.

Perhaps the answer to the question as to why teachers continue to perform their work roles with or without verbalized feelings, at a level that is acceptable to their administration year after year, can be found in their initial selection of a teaching career. Their formal
schooling preceding work is direct preparation for work. The study of teacher demand and supply done over a three-year period, 1969-71, reveals that about 88.5% of those who had entered teaching were retained. The implication is that those who choose teaching choose it because they want to make it a career - in the sense that they want to continue in it. A study of undergraduate career decisions indicates that the most retentive field was education, as it lost only 15% of students who began their university education as education majors. This study also reported that education as a career field ranked the highest in terms of recruiting students whose initial field of study was outside education, and that when compared to the net gains of a field, education again had the highest gains of students making it a career. This evidence throws some light on how an objective indicator may be used to measure attachment to an occupation, i.e., the retention rate of those who enter an occupation. Such an indicator adds something to those which rely mostly on the feeling states of individuals for validation.

A word of caution is necessary here. The amount of teacher turnover as a measure of attachment implies that those who do not like their job will leave for something else. Whether those who do not like their job actually leave it for something else is an assumption, because we have suggested in the preceding pages that the employed teachers may neutralize their feelings, and that they may not leave even when they do not like their job. Thus, this particular indicator can be used in conjunction with others and not alone and separate from the others.

In summary, from the foregoing comments, it seems that teachers'
attachment to the job could best be conceived as their involvement in the work situation in the schools. The evidence and argument presented so far have suggested that several aspects of the work situation are gratifying to the teachers involved. The measures of attachment employed in this research measured, perhaps, nothing more than the degree to which teachers are "internally" motivated to perform their job. Several shades of their attachment become known when their total situation and some of its salient features, are taken into account. Hence, for future research, those aspects of teachers' job which are gratifying to them should be combined with those measures that can be used objectively, i.e., independent of the cooperation of teachers. Of necessity, such a study would concentrate on studying attachment alone and study it rather stringently. Inclusion of several measures for the same crucial concept is likely to involve a comprehensive research design concerned with making a contribution to the measurement theory - that is a task which goes well beyond the present exploratory study. However, it needs to be emphasized that by supplying observational data on the teachers' attachment to the job, the present research has attempted to enhance confidence in the data which were gathered through the structured questionnaire. It is believed that "the confluence of proof from two or more independent sources" reduces the uncertainty about the phenomenon studied.15
REFERENCES


12. A Study of Teacher Supply and Demand, op. cit., p. 78.


In the previous two chapters, the critical evaluation of the research procedures has demonstrated the need for some extensive modifications in the content of the indicators used previously for the key variables. Since at this point the familiarity with the teachers' work-setting has increased considerably, it may now be possible to formulate questions which can retrieve information in a fairly well bounded manner. By paying greater attention to the indicators of crucial variables, a certain rigour will be introduced to the fixed-choice questions. As a strategy of measurement, the fixed-choice questions may be methodologically expedient but they may fall short of a certain degree of theoretical sophistication if their dimensions are left unspecified. Our past experience has shown that some of the items used for discretion, choice of working conditions, and work-attachment, invoked queries from the respondents rather than provide them with a psychological continuity of their own experience. By attempting to provide this psychological continuity to the respondents, by formulating questions which are sensitive to the responses they are intended to elicit, we will be able to move in the direction of exercising a greater control over the means of eliciting the desired information; this control was less than desirable in our previous undertaking.

It is with these considerations in view that the following research design is presented. Since we are aiming for more stringent measurement,
thus an elaborate design, we are excluding questions concerning the choice of occupation for the following reasons: As the working teachers have already made the initial choice, questions on occupational choice at the present stage of their working career would elicit nothing more than the possibilities of change which they might envisage vaguely. And if they have already received training, in order to make teaching a career, then questions eliciting possibilities of change would tend to measure nothing more than wishful thinking. It is possible that questions eliciting possibilities of change may in fact indicate job-attachment. Thus, it is essential that the measurement of job-attachment be kept distinct from the contaminating influences of the indices of occupational choice. Again, for the sake of economy of space, we are not considering questions on the teaching orientations and teacher-teacher contacts. Our focus of research is narrower than before and is concerned with freedom of choice in working conditions, discretion in work, and job-attachment (or work-attachment).

The Problem: The research problem focuses on the following two questions addressed to teachers at the secondary level:

1. To what extent do teachers experience a personal sense of freedom concerning working conditions and discretion in work?

2. Is this sense of freedom associated with their attachment to the job?

These questions are limited in scope, but they are amenable to empirical treatment and test.
Concepts and Indicators: (1) Freedom of choice in working conditions will be indicated to the extent that teachers say that (a) the subjects which they are presently teaching are appropriate to their areas of special training, (b) they have adequate opportunities to attend courses and conferences for their own professional development, and (c) they are often consulted by the school administration before initiation of new programmes.

To reinforce these subjective indicators, the following objective indicators can be used: (i) number of teachers not assigned to their subject area specialization either wholly or partly, (ii) number of teachers who are currently attending or who have made requests to attend courses/conferences/seminars relating to their own academic development, and (iii) during the past one year, the number of significant instances over which consultation took place between the school administrators and the teachers/teachers' representatives.

(2) Freedom to exercise discretion in work will be indicated to the extent that teachers say that (a) they can make changes in the prescribed curricula and materials for pupils who do not have the background to deal with them, (b) they can make decisions concerning the promotion and retention of students, and (c) they can determine and maintain their own pace of instruction without pressure from the school/district administration.

Objective indicator: the number of cases of suspension/transfer/problem-students in the classes handled by teachers over the last one year without recourse to school/district administration. Since one area in which teachers make discretionary decisions pertains to the maintenance of order in the class, this indicator will reflect teachers' refusal to
deal with "problem students"; and if they had some but they dealt with them themselves, it would show the extent to which they actually exercised discretion. As such, the indicator does not reflect a discipline-and-control orientation on the part of the teachers concerned.

Since the actual exercise of discretion depends on the extent to which the teachers' work is non-routinized, the opportunities to exercise discretion can be measured by asking the teachers directly to indicate (a) the average number of times in a week they have to meet chance, unanticipated happenings in their work, (b) how they handle these happenings—alone or in consultation with the school/district administration, and (c) the "per cent" of their formal training which comes into play in their work as teachers.

(3) Attachment to the job will be indicated to the extent that teachers say that (a) they are satisfied with their present teaching assignment, (b) they are likely to have the same teaching assignment over the next year, (c) they would choose teaching as a job if they were to choose an occupation over again, and (d) they like to be identified as teachers.

Objective indicators: (i) the number of teachers who have requested a transfer to some other school, and (ii) the number of teachers holding full-time tenured positions over the number of such positions available in the school/district.

In addition, some fill-in-the-blank kind of statements can be included to elicit responses which are not premeditated by the researcher;
e.g.: (a) what I like in teaching is ____________________________ ; or
(b) I decided to go into teaching when I was __________________.

This strategy of measuring satisfaction or attachment with the job should prove to be useful because it has the least amount of researcher bias to steer the responses into categories which he had thought about. It is also a strategy of measurement that has not been tried as yet and it might prove to be more adequate than the "critical incident" approach or the "essay" type approach in which biases of the respondents cannot be controlled.

Frame of Reference: Age is an important criterion in the articulation of a status system which links individuals to the society in which they participate. Studies have shown how age can have a bearing on the ways in which individuals map their work careers. For example, by considering both the subjective and objective aspects of a career, Buhler was able to distinguish five stages: (1) the "exploratory stage", which typically spans the years from 17 to 28; (2) the "selective stage", which lasts from approximately 28 to 43 years; (3) the "testing stage", which represents a five-year period in the mid-forties in which the individuals look both backwards and forwards, and by doing this, also assess their career to date and re-evaluate prospects for the future; (4) the "indulgence stage", which lasts from possibly 48 to 64 years, during which the individuals maximize self-gratification; and (5) the "completion" stage, during which the retiree lives upon memories of the past accomplishments. By examining work careers in industrial settings, two writers were able to corroborate the five stages, but they delineated these stages as follows: (1) preparatory period, 0 to 15 years; (2) initial
work period, 15 to 18 years; (3) trial work period, 18 to 34 years; (4) stable work period, 34 to 64 years; and (5) retirement. These stages may provide a moving perspective on the subjective aspects of a career, but they do not indicate how the individuals themselves interpret the meanings of their various attributes, and actions, and work experiences. Thus, the question of whether or not age is related to attachment to the job, can be answered only through empirical observations. However, these career stages do lead one to expect that individuals who are in the stable work period (34 to 64 years) of their life, are likely to be highly attached to their job. The data presented earlier in table IV.2 support this argument, but since the statistical evidence is not substantial, further verification is warranted. However, if age is as influential a variable as mentioned studies stipulate, then it is more practical to include age in the original statements of relationship between variables, to use it in advance, rather than use it as an aid to post factum interpretation of findings. Thus, both age and expectations of the working teachers to have control over their work and working conditions, can be linked together in relation to their attachment to the job. Hypotheses which link multiple variables are described as multiplicative models by Blalock. He emphasizes the point that when formulated in terms of continuous variables, these multiplicative models can generate predictions which may be tested even where measurement has been very crude, and they can also be helpful in ordering chaotic empirical findings.

The Hypotheses: (1) Teachers within the ages 34-64 and having much freedom in working conditions are likely to be highly attached to their job.

(2) Teachers within the ages 34-64 and having much discretion in work are likely to be highly attached to their job.
Two values for each of these variables are considered: low vs high. Freedom in working conditions and discretion in work and attachment to the job will be measured by developing indexes of the subjective indicators specified earlier. Objective indicators specified earlier will be used to validate the findings and interpret the results.

The Design of Inquiry: Cases will be examined by controlling for the district size, sex, and length of teaching experience. An equal number of cases from a small district and a large district of both men and women is contemplated. The size of the district will be determined by the number of students enrolled in the secondary schools. The pupil-teacher ratio can fluctuate between school districts but this is something over which not much control can be exercised by the researcher; therefore, the size of district determined according to the number of students appears to be the most neutral way of dividing the districts.

Sampling Procedure: Practical considerations suggest the selection of a purposive sample, i.e., cases are to be picked up according to age categories. As we have considered age and high choice of working conditions together, the focus will be on choosing cases that are within the 34-64 age category. This sample will constitute the cases required to test for the working hypothesis as formulated above. To verify the hypothesis further whether or not age and high choice of working conditions mix to produce high work-attachment, another sample of teachers with ages 33 and less would be desirable. If the measure of degree of association shows significant differences for the two groups, i.e., if it is
significantly larger for the 34-64 age group than for the age group 33 and less, then the working hypothesis will stand as confirmed. This manner of confirming the working hypothesis will reduce the possibility of alternative interpretations of the results, a concern which is at the heart of our argument in this revised design.

Whereas it is possible to have both large and small school districts represented equally in the sample, it may not be possible to have both men and women teachers represented equally. The reason for that is that men teachers outnumber women teachers at the secondary level in any school district.

The selection of the sample is likely to involve complicated field work because lists of teachers within the desired categories of age will need to be prepared before they are contacted to participate in the research.

**Methods of Gathering Data**: Data are to be gathered through a questionnaire which will consist of approximately sixteen questions with multiple response categories. These questions are distributed on the crucial variables as follows: three on working conditions; three on discretion in work; six on attachment; one on length of teaching experience; and one each on the subjects and the grades taught.

The questionnaire is to be followed by one half hour of direct interview to obtain reactions on the questionnaire items and any other relevant information which the respondents volunteer to give.

The information pertaining to the objective indicators listed earlier, will be obtained through office records. There might be a difficulty
in having access to those records. Perhaps the school/district administration can be convinced of the innocuousness of the information required. Since even before the teachers are contacted, the research has to be approved by the district/school administration, it is worthwhile to establish a good rapport with the administration.

The time at which the research is undertaken can be a crucial factor in establishing rapport with the school administration. Either the months of October and November or the months of March and April are likely to facilitate the gathering of data. In the experience of this researcher, the months of December, January and February, then May and June were not productive. During these months the teachers were found to be very busy with their work and the school administration was reluctant to allow the presence of a researcher.

**Analysis of Results**: The method of data analysis is tabular involving the standard multivariate analysis techniques on the lines of those that have already been presented in the earlier chapters. The results obtained will be fed back into the frame of reference. Since the data are to be analyzed according to age groups/district sizes/men and women, a reexamination of the working hypotheses may be inevitable.

It should be pointed out that since some of the measures used in this design are similar to those which have been used by other researchers, the results obtained are comparable. Thus the degree of contribution which this design is likely to make to information already available is somewhat different from the contribution which the exploratory study has made.
What About Classroom Participant Observation?: In the preceding design, the omission of participant observation in the classroom is rather striking. The reason that it has not been given explicit attention is that most teachers are not receptive to this kind of a suggestion, maybe because a "sociologist" is involved in the research and not an "educationist". In the experience of this researcher, not much came out when such a question was posed to various teachers. There were only four "bold" ones who let the researcher spend time in their classrooms when they were busy with the students: one was an English and arts teacher, one, an industrial arts teacher, one, a radio communication teacher, and the fourth one was a social studies teacher. Therefore, as a technique of acquiring data, participant observation cannot be relied on so far as the present research is concerned. If, however, during the course of field work, opportunities become available, they would be made use of for whatever contribution they can make.
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1. Specialized training as a factor affecting teachers' retention in education, and as a determinant of satisfaction has been discussed by F.D. Carver and T. Sergiovanni, "Complexity, Adaptability and Job Satisfaction in High Schools," The Journal of Educational Administration, 9 (May 1971) pp. 13-15. Another writer has observed that teachers who have done graduate work are more likely to continue in education. See R.M. Pavalko, "Recruitment to Teaching," Sociology of Education, 43 (Summer 1970) pp. 340-53.


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Seymour, F.J.C., "What is Professionalism?," The A.T.A. Magazine, 43 (June 1963).


APPENDIX I: I-A: GUTTMAN SCALE 1: ITEMS OF DISCRETION
I-B: GUTTMAN SCALE 2: ITEMS OF CHOICE OF WORKING CONDITIONS
I-C: GUTTMAN SCALE 3: ITEMS OF ATTACHMENT
I-D: SMALLEST SPACE ANALYSIS OF NINE ITEMS OF DISCRETION
### Guttman Scale 1: Items of Discretion

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<tr>
<th>Scale Type</th>
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Coefficient of Reproducibility = .81

Coefficient of Scalability = .45

Note: Items are entered from left to right; the left-most item is the most difficult, the last one the least difficult item to respond to. A valid scale should have a coefficient of reproducibility of .9 and of scalability well over .6.
GUTTMAN SCALE 2: ITEMS OF CHOICE OF WORKING CONDITIONS

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Errors: 10 17 1 21 18 20 39 0

Coefficient of Reproducibility = .87
Coefficient of Scalability = .24
### Guttman Scale 3: Items of Attachment

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Scale Type

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</tbody>
</table>

Sums 151 73 89 135 80 144 58 166

Errors 0 38 17 38 32 9 36 0

Coefficient of Reproducibility = .81

Coefficient of Scalability = .43
SMALLEST SPACE ANALYSIS OF NINE ITEMS OF DISCRETION

Two-Space Diagram

Coefficient of alienation = .11; the smaller the better.
APPENDIX II: QUESTIONNAIRE

Note: The questionnaire in its original design covers a broad range of interests not all of which have found place in this thesis. Hence a certain number of items has been left out of the analysis appearing in the preceding pages.
This questionnaire seeks information about teaching practices, teachers' feelings for work, their use of independent judgement in instructional matters, interaction among teacher colleagues, and some selected background characteristics of teachers at the Secondary School level.

The information obtained will be used by the undersigned in completing a Ph.D. dissertation. In addition, I believe the information will fill-in an information gap about certain aspects of teachers' behaviours.

An earlier version of this questionnaire was pretested in three school districts in B.C. and the response was enthusiastic. During the preparatory stage, the questionnaire received helpful suggestions from several teachers and two directors of secondary instruction.

Your cooperation in completing this survey will be invaluable. You are not required to give your name or the name of the school in which you teach so you can be assured of the anonymity of the information you give.

General results or significant findings from this survey will be made available to interested teachers, school administrators or educationists on request.

Kindly answer all questions.

Thank you.

Yours truly,

Mumtaz Akhtar
Graduate Student

Address for inquiries:

Department of Anthropology and Sociology,
University of British Columbia,
Vancouver 8, B.C.
YOUR EMphasis ON VARIOUS INSTRUCTIONal MATTERS

Please indicate how much emphasis you place on the following instructional matters by marking an X in the blanks as indicated.

<table>
<thead>
<tr>
<th></th>
<th>Strong emphasis</th>
<th>Moderate emphasis</th>
<th>Weak emphasis</th>
<th>No emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject-matter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline and control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition of skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition of facts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition of understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition of attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion of assignment within the prescribed time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have students competing with one another for excellence in studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintaining record of cases of tardiness and absence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
YOUR CHOICES ABOUT VARIOUS FEATURES OF YOUR WORK

Please indicate how much choice you have with respect to the following features of your work by marking an X or by writing in the appropriate spaces as indicated.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Much choice</th>
<th>Some choice</th>
<th>No choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whether or not I work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiment with new methods of instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handle discipline problems according to students involved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether or not I work as a teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommend books in addition to those prescribed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which school district I teach in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence school policies about instruction in the grades I teach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine the amount of paperwork involved in doing my work as a classroom teacher</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which school I teach in a particular school district</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vary the amount of time spent on different subject-areas with regard to students' state of learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which grade levels I teach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order supplies and procure equipment needed for instruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modify curriculum content with regard to student abilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which subjects I teach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modify achievement standards to correspond with student abilities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Are you able to use your independent judgement in your work as a teacher?  

1 [ ] Yes  2 [ ] No

Is teaching (not necessarily your job) the kind of work in which one can use independent judgement?  

1 [ ] Yes  2 [ ] No

Do you engage in activities other than teaching in which you can use your independent judgement?  

1 [ ] Yes  2 [ ] No

If yes, could you mention just one such activity __________________________

Which kind of job would you prefer to have if you were given a choice?  

1 [ ] A job with well-defined routine duties.  

2 [ ] A job with opportunities to use independent judgement.
YOUR RELATIONSHIPS WITH OTHER TEACHERS

Please give your answer to the following questions by marking an X in the appropriate spaces as indicated.

**How many teachers in your present school do you know that you enjoy getting together with?**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or more</th>
</tr>
</thead>
</table>

**Are these teachers the same age as you are?**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

**On the average, how frequently do you get together with these teachers off-the-school premises?**

<table>
<thead>
<tr>
<th></th>
<th>At least once a week</th>
<th>At least once in two weeks</th>
<th>At least once a month</th>
<th>At least once a year</th>
</tr>
</thead>
</table>

**Do you feel you see these teachers often enough?**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

**How many of these teachers do you consider close personal friends (persons with whom you share confidences, nothing to do with the work of the school)?**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or more</th>
</tr>
</thead>
</table>

**How many teachers in other schools do you know that you enjoy getting together with?**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or more</th>
</tr>
</thead>
</table>

**Are these teachers the same age as you are?**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

**On the average, how frequently do you get together with these teachers?**

<table>
<thead>
<tr>
<th></th>
<th>At least once a week</th>
<th>At least once in two weeks</th>
<th>At least once a month</th>
<th>At least once a year</th>
</tr>
</thead>
</table>

**Do you feel you see these teachers often enough?**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

**How many of these teachers do you consider your close personal friends (same definition as above)?**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or more</th>
</tr>
</thead>
</table>
YOUR FEELINGS ABOUT YOUR JOB

Please give your answer to the following statements by marking an X in the blanks as indicated.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The time I spend teaching is the most rewarding time I spend during a day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would choose teaching if I were to choose an occupation over again</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to be identified as a teacher</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would stop teaching if I came into enough money</td>
<td></td>
<td></td>
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<tr>
<td>To me, success in things I do away from the job is more important than my success as a teacher</td>
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<tr>
<td>I would want one of my children to be a teacher</td>
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</tbody>
</table>
SOME QUESTIONS ABOUT YOURSELF

Please give your answer to the following questions by writing in the appropriate spaces or by marking an X in the blanks as indicated.

Age: _____ years

Sex: [ ] Male  [ ] Female

Marital status: [ ] Single  [ ] Married  [ ] Other

Is your spouse gainfully employed? [ ] Yes  [ ] No

How many dependent children do you have?

_____ children

What is the highest degree/certificate that you have?

Degree: [ ] No degree  [ ] Bachelors  [ ] Masters  [ ] Doctorate

Certificate: ____________________________________________

What grade levels are you presently teaching?

[ ] 8  [ ] 9  [ ] 10  [ ] 11  [ ] 12

Please indicate your subject-area specialization(s) by training.

1. _____________________________________________

2. _____________________________________________

3. _____________________________________________

What subjects are you presently teaching?

1. _____________________________________________

2. _____________________________________________

3. _____________________________________________

Is there a government exam in the subject(s) you teach? (Please answer corresponding to the previous question.)

1. ___________________________  [ ] Yes  [ ] No

2. ___________________________  [ ] Yes  [ ] No

3. ___________________________  [ ] Yes  [ ] No
What is the average class-size that you teach?

____ students

For how many years have you taught now, counting the present year as complete?

____ years

For how many years have you been teaching in the present school?

____ years

For how many years have you been teaching in the present school district?

____ years

Was teaching the first year-round, full-time job that you had?

1[ ] Yes  2[ ] No

Did you work in another job for at least a year before you took up teaching?

1[ ] Yes  2[ ] No

Are you presently holding an administrative assignment?

1[ ] Yes  2[ ] No

If yes, what is it?

______________________________

Do you take school work home?

1[ ] Yes  2[ ] No

If yes, how often?

______________________________

YOUR COMMENTS, IF ANY:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

THANK YOU FOR YOUR TIME AND COOPERATION.