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LA THÈSE A ÉTÉ
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VALUE HIERARCHIES,
FLEXITIME
AND THE
COMPRESSED WORK WEEK

Submitted to the School of Graduate
Studies, University of Ottawa, in
partial fulfillment of the
requirements for the degree of
M. A. (Sociology).

Walter Myhal

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CHAPTER I

THEORETICAL PERSPECTIVES

The number of hours the average person works per week has declined dramatically during this century. The result is that we now have to choose among several options as to how we are to distribute these hours of work. The two principal variations on the traditional work week are described as follows:

Compressed Work Week:

decreases the number of days worked in a week without decreasing the number of hours of work per week by lengthening the number of hours worked per day;

Flexitime:

allows the workers some latitude in starting and stopping work each day without reducing total working time per some specified length of time.

The historical context of hours of work is that from the fourteen hundreds to the seventeen hundreds a twelve-hour day was normal. In 1800 work days were 14 to 17 hours, in 1833 they were 12 hours, and in 1889 they were 10 hours long (Woytinsky). In Canada the standard weekly hours for

non-office employees in manufacturing was gradually reduced from 45.32 in 1947 to 40.44 in 1972. If we subtract holidays and vacations the net working week declined from 42.97 hours to 36.54 (Labour Canada, 1974). The trend is continuing although at a declining rate.

Now that people have significant amounts of leisure per week we must decide on how this leisure time is to be distributed; is it to be bunched up into a three- or four-day "weekend" or is it to be interspersed with work time according to varying individual and personal needs? With shorter standard work week hours we have a choice of strategies. The number of work hours can be compressed into three or four days, the average work day could be shortened while keeping the hours fixed, or we could introduce some flexibility in the hours of work. With the last option there are a number of variations. The flexibility can be within the day, the week, the month or the year. There may or may not be a specified "core-time" during which hours, attendance is compulsory. If there is no "core-time" then the hours are said to be fully flexible. If the basis of flexibility is a week or longer then some form of "banking" may be included, i.e., the ability of an individual to build up a debit or credit of work hours in one time period which may be transferred to other time periods.

The context in which this may be examined is Organizational Theory which is concerned with how the activity of individuals can be coordinated in order to achieve some goal or purpose. Ultimately it is not organizations that act but the individuals in organizations that act according to their perception of what is the best option given all the various relevant possibilities (Silverman, p. 129-150). The questions of hours of work is one of the principal areas of concern in organizational theory. It relates to other aspects of organizational theory as well: span of supervision, delegation of authority, hierarchical structure, alienation, productivity, control, organizational effectiveness, etc.

The interface of the individual and the organization has been problematic since the arrival of the organization. The literature revolves around concepts of human needs and technological or societal imperatives or requirements. Upon this perceived conflict rests a large body of ideas dealing with organizational structure, managerial style, labour relations, etc. As virtually all the various and diverse concepts in organizational theory can be related in one way or another it is necessary to focus the study on a conceptually clear area, namely, organizational behaviour.

There are four major elements to be considered when

dealing with organizational behaviour: people, organizational structure, technology and the external social systems.

The people element refers to the various needs of individuals in any organization. People in fact constitute an internal social system of the organization. There is a symbiotic relationship between the individual and the organization; the organization needs reliable role incumbents to thrive but reciprocally the organization must satisfy certain needs of these role incumbents. If the organization does not satisfy these needs then the individual would be foolish to put forth his best effort. Clearly this is not a dichotomous issue, rather, we have hierarchies of needs and the way the individual will perform on the job relates, in part, to the extent that he perceives his own various needs being met. The goals of the two are not co-extensive but there is a varying degree of commonality.

Organizational structure refers to the network of role definitions and rules governing their relationship. How the individual's task is defined and how he relates with other members of the organization will clearly influence not only what he does but the manner in which he does it and hence has a direct effect on the wellbeing of the organization.

Technology refers to that aspect of the work environment that relates to what is actually done on the input material, how the work process is carried out and the various engineering and economic factors involved. Whether the task is routine or non-routine, craft or research, and whether it requires specialized skills or not, will exert a strong influence on how the organizational structure is set up and how the people in the various roles relate to their work environments (Perrow, 1970).

The external social system is the environment within which the three preceding elements are located. Thus the organization interacts with other organizations; the way the organization is structured is a function of the external social system which includes among other things the prevailing theories and practices regarding organizational structure, management style, etc. The technology found in any organization is in effect a subset of a larger body of knowledge about technology. Finally the people in any organization have many roles, one of which is that of the employee. Thus it is important that the role of the employee not conflict excessively with the role demands put on an individual by the external social system.

It is with respect to the last situation that hours of work becomes of particular interest. Time is a strictly limited resource the allocation of which can pose a serious

problem for the individual and hence for the organization and society in general.

People in an organization and the external social system can be conceived of as constituting the social system of an organization. The organizational structure and technology may similarly be conceived of as the technical system of an organization (Davis, p 6). At the interface of the social and technical systems we find the administrative system from which the organizational-behavioural point of view can lead to improved people-organization relationships. (Davis, 1972, p 6).

Knowledge relating to organizational theory has been grouped and organized in many different manners depending on the objectives or point of view of the writer. Price (1968) has attempted to introduce order by developing an inventory of propositions regarding organizational effectiveness and has grouped many empirical findings under systems of economics, politics, control and ecology. Ivan Banki even saw the need for a dictionary of terms relating to supervision and management (Banki, 1974).

The particular aspect of organizational theory that is relevant as a theoretical context here is organizational behaviour. The study of the human relations aspect of

work began with the Hawthorne experiments (Roethlisberger, 1941). In attempting to conduct work on Taylor's theory of Scientific Management they accidentally discovered that people are not simple stimulus-response mechanisms. The significance of how things are perceived was dramatically demonstrated. Ever since, industrial psychologists and organizational sociologists have been dealing with the problematic interface of the individual and the organization. McGregor's Theory (McGregor, 1960), Likert's System 4 (Likert, 1967 and 1961), Maslow's Hierarchy of Needs (Maslow, 1954), Blake's Managerial Grid (Blake, 1966), and Vroom's Expectancy Theory (Vroom, 1964), are perhaps some of the more salient attempts to deal with this relationship.

The question of what the workers actually do and how they do it is significant because it is the basis of a lot of managerial resistance to new ideas. Typically managers are heard saying that some new approach may work in the other industry but not in theirs because of the kind of work they have to do. "Flexitime may work in an insurance company but not in my shop because it's an assembly line". Numerous experiments have shown that Flexitime, Compressed Work Weeks, Reduced Work Weeks, and other innovative approaches can work in one form or another in just about any organizational setting.

Other arguments relate to the environmental question. "Flexitime may work in Europe but not in North America". The fact of the matter is that again experience obviates these arguments. A variant of this argument is that the competitive environment necessitates a fairly tight control so that productivity can be maintained. Again it can be shown from industrial experiences that usually neither Flexitime nor Compressed Work Weeks diminish productivity but in fact raise it. The only question here is whether it is a Hawthorne effect, i.e., is it that any change will raise productivity while it is perceived to be an experiment reflecting a managerial concern for the wellbeing of the workers.

The question of environmental imperatives whether technological, social, or economic in the end will be resolved only when every organization has tried it but successful experiments range from high technology-research operations to large clerical offices to assembly line operations and to heavy industrial batch processes such as may be found in steel mills.

Knowing that Flexitime and Compressed Work Week can work in various settings, we are left with the question of why some people propose it while others oppose it. In part this has to do with some of the "common sense" views of managers.

The traditional ideas of human nature were encapsulated by Chris Argyris: "...The formal organizational principles make demands on relatively healthy individuals that are incongruent with their needs. Frustration, conflict, failure and short-term perspective are predicted as resultants of this basic incongruency" (Argyris, 1957). For McGregor this incongruity was associated with the traditional autocratic managerial assumptions which he called Theory X (McGregor, 1960). This Theory assumed that:

- 1) Man dislikes work and tries to avoid it.
- 2) The average human being lacks responsibility, has little ambition, and seeks security most of all.
- 3) The majority of the people need to be controlled, threatened, and coerced to work.

He proposed an alternative Theory Y based on the assumptions that:

- 1) Work is as natural as play or rest.
- 2) Man will exercise self-direction and self-control in the service of objectives to which he is committed.
- 3) Commitment to objectives is a function of the rewards associated with their achievement. The most significant of

such rewards, eg., the satisfaction of the ego and self-actualization needs can be the direct products of effort directed toward organizational objectives.

- 4) The average human being learns, under proper conditions, not only to accept but to seek responsibility.
- 5) The capacity to exercise a relatively high degree of imagination, ingenuity and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
- 6) Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized (McGregor, 1960, pp. 47-48).

Argyris saw the relationship between individuals and the formal organization in terms of a conflict. The individual struggling for independence while the formal organization seeks to constrain its employees. McGregor, on the other hand, differentiated between two ways management can perceive its employees' motivations and attitudes towards work.

It would seem that the ideas of flexible working hours is fully consonant with each of the points in

in McGregor's Theory Y. It would certainly be in accord with the higher needs in the needs hierarchy as presented by Maslow. He argues that needs can be ordered into five levels of priority. The five classes of needs, progressing from the lowest to the highest are: basic physiological needs; safety and security; belonging and social needs; esteem and status; and self-actualization and fulfillment. Fixed hours seem counter-productive, even at the fourth level, in that an individual is not trusted in matching his efforts to the task. If an individual is to obtain self-actualization, i.e., becoming all one is capable of becoming, then he must feel that he has the freedom to do his task as he thinks is best. The sense of responsibility in getting the job done properly would be enhanced and hence lead to a greater feeling of accomplishment. Although Flexitime of itself will not provide self-actualization and fulfillment it does appear to have a supportive role to play.

Herzberg's distinction between maintenance factors and motivators is perhaps a clarification of how Flexitime fits in. Herzberg talks about two sets of needs. Hygiene needs or maintenance factors are those things that keep people from being unhappy, eg., pay, working conditions, supervision, etc. These maintenance factors do not motivate people very much. Motivators are those factors

that permit a worker to achieve high job satisfaction, to have responsibility, to advance and grow, and to do meaningful and significant things (Herzbert, 1959 and 1966). Flexitime may be conceived as one of the factors that permits an employee to perceive himself as having greater control and responsibility for his work and hence tends to be a motivator for employees by improving the quality of worklife.

The problem of worker motivation can be approached from two perspectives. Maslow and Herzberg stress the individual psychology of the employee whereas writers like Likert and Blake and Mouton stress managerial framework. Likert conceptualized a continuum along which he identified four types of organizational systems. Number 1 is the most authoritarian whereas number 4 is the most participative (Likert, 1967). Flexitime would tend to be more consonant with the system 4 type of organization which relies more on worker initiative and self-control.

Blake and Mouton developed the managerial grid. They identified two dimensions: concern for production and concern for people. The organizational development training programs seek to maximize both concerns resulting in what Blake and Mouton call the Team Management style of management. Other less desirable combinations produce Country Club

management. Impoverished Management, Task Management, or some compromise referred to as Dampened Pendulum (Blake and Mouton, 1962). In this context Flexitime seems to clearly facilitate the ideal type of management.

The question is what basis is there for selecting among the various options. Initially a choice has to be made as to whether a change is required to be made or not. If a change is seen as desirable then the next bifurcation seems to be between Flexitime and Compressed Work Week. As Janice Hedges says, "One senses in many discussions of altered work weeks a feeling that compressed and flexible schedules are in competition; that eventually one or the other of them is expected to emerge the victor over the standard work week. The chances are, it seems to me, that we will have compressed work weeks, flexible work weeks and standard work weeks." (Conference Board of Canada, 1973).

During a 1971 conference of labour market experts convened by the Organization for Economic Cooperation and Development (OECD) much discussion occurred about experimentation with the traditional work week. At this conference, Mr. Jack Meyer, a U.S. delegate and official of the Department of Labour

"found that his main task was defending the U.S. against the 'unfounded myth' that the

country has bred a money-grubbing work force that is interested in getting work out of the way - by compressing the work week, if necessary - rather than in enjoying the more relaxed approach to work inherent in flexitime. Heinz Allenspach (director of the Swiss Employers Association) criticizes four-day week experiments in the U.S. on the ground that they derive from the idea of 'work as a chore that offers no prospect of developing the personality'."

(Businessweek, October 7, 1972, p. 81)

If this accusation is accurate then there may be serious long-term implications in selecting one or the other. The question then becomes: what is at the basis of employees preferring one or the other? Does the "money-grubbing" attitude come first or is it a consequence of the compressed work schedule? Obviously we are dealing here with questions of attitudes.

Conceptualizing preference for compressed or flexible work schedule as an attitude permits us to use Milton Rokeach's theory that complex attitudes are based on relatively few values (Rokeach, 1970, p. 112, 124, 159). He has two sets of values, terminal and instrumental. Terminal values refer to objectives which people perceive as worth striving for, whereas instrumental values are desirable ways of achieving certain objectives. By using panel techniques he was able to produce two sets of 18

values which can be used to assess the value hierarchies of respondents who are asked to rank them in order of importance to themselves.

The purpose of this thesis is limited to conducting empirical research in the form of testing a hypothesis. Although this has broad theoretical implications, these are not thoroughly examined because of limited resources and the desire to keep it as a one-man project.

The findings however have implications for administrative systems with respect to where the needs and desires of individuals interface with those of the organization. The dimensions identified by Blake and Mouton as concern for production and concern for people do not necessarily confront each other with incongruent needs as Argyris maintained. Flexitime can introduce the type of adaptability that will minimize the incongruency while optimizing the achievement of organizational goals and personal needs.

Any of the current proposed variations on the hours of work might have associated with the change added costs to the organization; at the very least any change will of itself be disruptive of the status quo and long standing managerial traditions. The author believes that these costs

will be minimal and might be more than offset by improved quality of production which would result from improved attitudes of individuals. In particular, flexitime would help resolve conflicting demands on the limited time of employees by freeing them from fixed hours. This change ought to improve the achievement of the higher needs of esteem and status, and self-actualization as defined by Maslow.

In terms of Herzberg's motivation-maintenance model, flexitime would be a job condition whose presence would motivate employees. It is proposed that flexitime would produce a shift towards Likert's system 4 or a participative, human-oriented climate which produces higher productivity and job satisfaction. In terms of Blake and Mouton's Managerial Grid, flexitime would promote a "Team Management" style of management.

The current interest in "worker democracy" and "quality of work life" is symptomatic of the urgency in resolving the needs of organizations and individuals. Two approaches to this issue are typified by the Compressed Work Week and Flexitime. One of the considerations in opting for one of the two is the effect on workers. The compressed work week has been accused of breeding a money grubbing work force whereas flexitime is said to produce

a more enjoyable and relaxed approach to work.

The objective of this thesis is limited in scope to ascertaining whether or not there is a relationship between an attitude expressed as a preference for Compressed Work Week or Flexitime and the value hierarchies of the individuals holding these attitudes. The existence of a relationship would influence management's selection of one or the other alternative depending on which is likely to be associated with employee attitudes conducive towards job satisfaction and productivity. Data pertinent to understanding this relationship was collected and analyzed with the conclusion that a relationship exists albeit not as simple as the accusation implies.

CHAPTER I

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M E T H O D O L O G Y
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CHAPTER II
METHODOLOGY

The distinction that Milton Rokeach has made between attitudes and values suggests that there may be thousands of attitudes but relatively few values. Attitudes are the reaction to an issue or situation to which the relevant values are applied. Rokeach defines attitudes as follows:

An attitude is an organization of several beliefs focused on a specific object (physical or social, concrete or abstract) or situation, predisposing one to respond in some preferential manner (Rokeach, 1970, p. 159).

Thus an attitude is the evaluation of an object or situation as desirable or undesirable. No attitudes need exist a priori. If an individual has a set of values, an attitude, based on these values, will be generated in reaction to a situation or issue. The issue dealt with, in this paper, is the distribution of hours of work and leisure or more specifically Flexitime and the Compressed Work Week with all that each entails. The attitude, in this case, is registered as a preference for one option or the other.

Rokeach differentiates between terminal and instrumental values. Terminal values are situations or conditions worth striving for. Not all of these end-states have the same level

of importance for an individual and thus can be ranked. Similarly instrumental values refer to ways of achieving one's goals and objectives; instrumental values may also be ranked. In the words of Rokeach:

Values ... have to do with modes of conduct and end-states of existence. To say that a person "has a value" is to say that he has an enduring belief that a specific mode of conduct or end-state of existence is personally and socially preferable to alternative modes of conduct or end-states of existence (Rokeach, 1970, p. 159).

This view of attitudes and values complements the widely accepted Expectancy Theory as a model of motivation which was developed by Victor H. Vroom (Vroom, 1964). This theory proposes that motivation is the result of the values an individual is striving for multiplied by the probability of success. The relationship can be expressed as a formula:

Motivation = valence x expectancy

Valence refers to the degree to which an individual prefers a particular outcome as opposed to other possible outcomes. Thus if an employee very much wants to go on long weekend trips then the Compressed Work Week would have a higher valence than Flexitime.

Expectancy, although a little more difficult to quantify, refers to the perceived probability that some

desired goal will result from a specified action. If an employee wants to be able to have a choice of days off and knows that labour-management agreements guarantee choice, on the basis of seniority, then he has a high expectancy that eventually he will have discretion over his days off.

The values for valence may be positive or negative depending on whether the employee desires some outcome or not; if an employee is indifferent then the value would be zero. Expectancy, which is a probability of outcome, may range from zero for no probability to one for complete certainty. Through experience people assign their own values to various goals and to expectancies, or action-outcome relationships. In effect, when an individual has a choice of actions that may be pursued, he analyses the various trade-offs or performs a type of cost-benefit analysis based on his values and on his perceived action-outcome relationships. Motivation will then result in favour of the highest multiplicand.

In the context of Rokeach's theory about the relationship between values and attitudes this work defines preference for Flexitime or Compressed Work Week as an attitude and attempts to determine whether there is a relationship between this attitude and value hierarchies.

The hypothesis, stated in the null form, is that there is no difference in the value hierarchies of those who have different preferences for change in regard to hours of work.

The method used for collecting data to test the hypothesis was a questionnaire of moderate length. The essential idea was to administer a questionnaire to a sample, classify respondents as to whether they preferred the Compressed Work Week or Flexitime and then, test to see whether there was any difference in how these groups ordered certain values. Prior to this test it was necessary to examine the possibility that the preference was determined by other selected biographical factors.

The questionnaire consisted of four parts:

Part I: Leisure preferences

This part identifies any desires for a change in the hours of work and what people do with their leisure time.

Part II: Value survey

Part III: Job Satisfaction Survey

Part IV: Biographical data

This part captures basic descriptive data such as age, sex, income, etc. which might have relevance to the hypothesis.

Part I consists of four questions. The first identifies the degree to which respondents would or would not like to see a change in the way the work week is set up. The second question was phrased as follows: "If there were to be a change, would you prefer Flexitime or Compressed Work Week?" The question was close-ended and in order to permit a finer gradation of answers five answers were provided: Flexitime by far, Flexitime, No preference, Compressed Work Week, Compressed Work Week by far. Thus, it was possible to classify respondents into five groups and test whether or not each group had the same value hierarchy. The third question was an open-ended question asking why this preference was expressed. An explanatory sub-question asked how the desired change or lack of change benefited the respondents personally. Upon examination of responses twelve answer categories were identified. In addition, it was felt that leisure time activity might have a bearing on preference for hours of work and so the fourth question, in this part, asked "How do you spend your time off work?" Respondents were asked to check the one of eight activity types that occupied the most of their leisure time. Provision was made for an open-ended choice with a request to specify what the activity was. The rationale for this question lay in the possibility that a leisure activity such as fishing or travelling might be facilitated by a three or four day weekend. This indication resulting from some

preliminary interviews was not supported by the findings of the study.

Part II comprised Halgren Test's Value Survey as designed by Milton Rokeach. The test consists of two sets of values: terminal and instrumental. Milton Rokeach used a phenomenological approach assuming that -

"... every person who has undergone a process of socialization has learned a set of beliefs about modes of behaviour and about end states of existence that he considers to be personally and socially desirable. The former kind of values we call instrumental, the latter, terminal values."

(Rokeach, 1971, pp. 21-22).

Each set of values consists of 18 items which the subject is required to rank in order of decreasing importance to him. In form D ~~the~~ the Value Survey, the one used, each of the 36 values is printed on a gummed label which peels off and can be moved from place to place. This form of the Value Survey was selected because in many ways it is an ideal instrument. "In a matter of 10 to 20 minutes, it yields up reasonably reliable measures of respondents' 36 values; it is ... easy to understand regardless of educational level..." (Rokeach, 19-- , p. 38).

"Form D (gummed labels) reliabilities range from the -.30's to the high .90's for the terminal value systems and from the .10's to the high .90's for the instrumental value systems. The median reliabilities are from .78 to .80 for the terminal values and are from .70 to .72 for the instrumental values" (Rokeach, 1971, p. 24).

Part III determined the level of Job Satisfaction by means of Brayfield and Rothe's Index of Job Satisfaction. The index is designed to be a general measure of job satisfaction. The underlying assumption of this index is that the level of job satisfaction can be inferred from the individual's attitude towards his work. The index consists of 18 statements about jobs. These items have Thurstone scale values ranging from 1.2 to 10 with intervals of approximately .5. Likert scoring weights for each item range from 1 to 5 and the range of possible scores is 18 to 90 with 54 (undecided) the neutral point (Miller, p. 268). The direction of scoring for half of the questions is usually reversed but for sake of easier pre-coding and computation the index value was calculating by adding the positive statements and subtracting negative statements thus making the range of possible scores -36 to 36 ($9 \times 5 - 9 \times 1$) with 0 (undecided the neutral point). With regards to reliability, in one test, "the odd-even products moment reliability coefficient computed ... was .77 which was corrected by the Spearman-Brown formula to a reliability coefficient of .87" (Miller, p. 268). The validity of the index appeals to face validity but it does correlate highly with other indices, e.g. scores on this index correlate .92 with scores on the Hoppoch job satisfaction scale.

Part IV of the questionnaire contained the biographical questions and elicited information on age, sex, marital status, education level, religious affiliation, type of occupation, total family income, years of employment, and number of children by age group. The years of employment was in the form of three sub-questions:

"How many years have you been:

- a) working?
- b) at the same company?
- c) at the same job?

These questions were asked for three reasons. One, variables such as age, sex, education, etc., are highly prevalent in studies of this nature. Two, these "biographical variables" are useful for describing the group of respondents making it possible to get some idea as to whether the group may be seriously unrepresentative of the population or local work-force. Third, some of these questions tapped variables that had some "face-validity" in that they might be expected to have an impact upon the attitudes of certain groups of individuals. Questions concerning how people spend their discretionary time (Part I, No. 4), how many years they have been worked (Part IV, No. 9), and how many children they have (Part IV, No. 10), were asked as result of some preliminary interviews and consultations. The latter type of question appeared to the author as having a strong possibility of being relevant to determining an individual's preference for Compressed Work Weeks or Flexitime.

The number of questions that was asked was restricted by several considerations. It was desirable to keep the questionnaire as short as possible, commensurate with gathering the most essential information, in order to improve the response rate and to minimize other problems associated with long questionnaires, such as respondent fatigue. Given the voluntary nature of the participation of the management in the organizations surveyed, it was desirable that the task of answering not appear too onerous. Finally limited resources restricted not only the number of questionnaires printed but also the amount of analysis that could be undertaken.

The questionnaire was distributed to three organizations: one private company on a regular work week, one public transportation company using flexitime, and one government department, parts of which were on flexitime. As this was entirely voluntary on the organizations' parts, the rigour with which the samples were selected left something to be desired. It was felt that it would have been impractical to insist on random distribution and so appropriate managers were selected, the study was explained to them, and their co-operation was solicited. They were given a number of questionnaires and asked to distribute them as randomly as possible among their employees. Judging by the pattern of response there does not appear to be any significant bias. The respondents received a package containing an

explanatory letter, the question and a stamped self-addressed envelope to facilitate the return of the instruments. The usual assurances of anonymity and confidentiality were expressed.

The questionnaire package contained a stamped self-addressed envelope. So as not to require the use of "company-time", the respondents could fill out the questionnaires at home and have added confidentiality.

When the questionnaires were returned they were submitted for key punching. Most of the questions were pre-coded with fixed alternative answers. Coding schemes for the open-ended questions were developed on the basis of the responses received. Key punching was done with verification and followed by a partial manual inspection. Final cleaning of the data was done after a Frequencies printout, indicating the range of answers, was obtained.

Analysis was done mostly by using SPSS (Statistical Package for the Social Services). In addition some peripheral work was done using BMD, Fortran, and APL.

The first step was to perform a Frequencies program on the data in order to obtain the distribution of answers for each question.

Cross tabulations were performed in order to determine whether there were any simple explanations of desire for change or preference for type of change. The obvious variables such as age, occupation, and education were included in the cross tabulations. When the various biographical variables were regressed against the dependent variable, preference for Flexitime or Compressed Work Week, the results indicated no strong relationships thus confirming the inference drawn from the cross tabulations.

In order to determine whether there was any difference in the value hierarchies of the five groups some form of rank order coefficient was required. The usual Spearman Rank Order Coefficient or Kendall's Tau were not suitable because they could deal with two groups only. It would have been necessary to compare each group against the sum of the five groups which would be risky in terms of the potential for interactivity.

The non-parametric test selected was Kendall's Coefficient of Concordance (W) which measures the relation among several rankings of objects. The procedure consists of summing the ranks of each of the N objects, as assigned by k judges, finding the mean of the sums, expressing each sum as a deviation from the mean, and squaring these differences (s). The final computation formula is:

$$W = \frac{S}{\frac{K^2 (N^3 - N)}{12}}$$

(Siegal, 1956, pp. 229-239)

The test was performed and the between group was less than the overall coefficient of concordance. The implication was that when the average rank of each value for each of the five groups was computed the amount of agreement between the five groups in the ranking of the two sets of values was less than the agreement among all the individuals that composed all five groups. This was attributed to the fact that the values were indeed different and that relatively few of them pertained to preference for Compressed Work Week or Flexitime. This was confirmed by doing a Factor Analysis on the terminal and on the instrumental values. The analysis confirmed that the values were substantially different.

The relevant values were identified using Discriminant Analysis. This procedure enables one to select among many variables which ones are the best predictors of membership in pre-determined groups -- the dependent variable. On the basis of this test, the relevant values were identified.

CHAPTER III

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FINDINGS

CHAPTER III

FINDINGS

Description of Respondents

Examination of the returned questionnaires indicates that there were 103 respondents. The distribution of the respondents can be broken down in two ways - government/non-government and on flexitime/not on flexitime. The composition can be represented as in Table 1. Twenty-eight of the respondents were male and seventy-five were female. Thirteen were single, eighty-four were married, five were divorced and one was widowed. Sixty-three indicated they had children while forty did not. The age and number of children of respondents is presented in Table 2. There was only one response of more than five children. Total indications for each of the three age categories were virtually equal.

The average age of respondents was thirty-nine; this was also the median. The minimum and maximum ages were twenty and sixty-three respectively. The quartile ranges were: 20-29, 30-38, 39-46 and 48-63. The questionnaire asked respondents to indicate the highest level of education they had attained by circling one of six categories. They were by and

T A B L E 1

DISTRIBUTION OF RESPONDENTS BY
EMPLOYER AND HOURS OF WORK

| EMPLOYER | FLEXITIME | NON-FLEXITIME | TOTAL |
|------------------------------------|-----------|---------------|-------|
| Government | | | |
| (Consumer and Corporate Affairs | 35 | 37 | 72 |
| Non-government | | | |
| Printing Company | 14 | | |
| OC Transpo | | 17 | 31 |
| TOTAL | 49 | 54 | 103 |

T A B L E 2

DISTRIBUTION OF RESPONSES BY
NUMBER OF CHILDREN AND AGE GROUPS

| Age Group | Number of Children | | | | | Total Responses | Total Number of Children |
|------------------------|--------------------|----|----|---|-----|-----------------|--------------------------|
| | 1 | 2 | 3 | 4 | * 8 | | |
| under 6 years | 17 | 10 | 1 | 0 | 0 | 28 | 40 |
| between 6 and 15 years | 15 | 6 | 7 | 0 | 0 | 28 | 48 |
| over 15 years | 11 | 7 | 6 | 4 | 1 | 29 | 67 |
| TOTAL | 43 | 23 | 14 | 4 | 1 | 85 | 155 |

* None of the respondents indicated having 5, 6, 7, or more than 8 children in any of the age groups.

large and fairly well educated. Only two had no secondary education, fifty-two had at least some high school and forty-six had at least some university. The educational achievement levels are represented in Table 3. In order to supplement the formal education data, the questionnaire asked respondents whether they had any certificates or diplomas from a trade school, community college, Cegep, or business school. Fifty-six out of one hundred indicated some certificates or diplomas other than academic.

The religious affiliation of the respondents was, as might be expected, primarily catholic and protestant. The distribution is presented in Table 4.

Respondents were asked to indicate the total family income for the previous year. This is as opposed to their own salary. The sample had an average income of approximately \$12,000 but as answers were in terms of five fixed choices it cannot be specified exactly. The pattern of answers is presented in Table 5.

Although the respondents in this study were not meant to be a sample in the scientific sense, unavoidably the colloquial connotations are present whenever a few are selected out of a larger group for study. To give a sense as to whether the respondents are normal or average is difficult. The manner of collecting the information by

Statistics Canada is different from the methods used in this study (eg., the ways of classifying and grouping were different). Furthermore to which group should they be compared?

The 71 Census is perhaps the most comprehensive survey of the population and although this study does not identify the location of the respondents' residences, the Ontario part of the Ottawa-Hull Census Metropolitan Area of the Census is chosen on the assumption that a broader or smaller sample base may be less well matched.

A comparison of the respondents to the population is offered on a few key factors. The median age in the Ontario part of the Ottawa-Hull Census Metropolitan Area was 28. The average and median ages of the respondents was higher, 39 but the approximate average age of the labour force in this area was 36 years (Derived from data in 1971 Census of Canada Cat. #94-705, Table 11, ages 15-64). The average total family income of respondents was \$12,000 per annum as compared with \$12,651 (1971 Census of Canada Cat. #93-746, Table 4) for all families in the Ontario part of the Ottawa-Hull Census Metropolitan Area. Other differences, such as in the highest level of education attained and in the distribution by religious affiliation can be understood by the fact that the group of respondents were not a true sample but rather were drawn mostly from a set pool of federal employees.

Most of the respondents saw themselves in administrative (35) or professional (28) roles. The remainder were either supervisors (14), skilled workers (12) or general office workers (10). The distribution of the occupational types through the four groups, is represented by Table 6.

T A B L E 3

HIGHEST LEVEL OF EDUCATION ATTAINED

| Category | Percentage | Number |
|--------------------------|------------|--------|
| Elementary completed | 2 | 2 |
| Secondary not completed | 19 | 19 |
| Secondary completed | 33 | 33 |
| University (no degree) | 11 | 11 |
| University (with degree) | 35 | 35 |
| TOTAL | 100 | 100* |

* N.B. There are three missing cases.

T A B L E 3 A

HIGHEST LEVEL OF EDUCATION ATTAINED

| RESPONDENTS | | CENSUS (Labour Force) | |
|--------------------------|------------|-----------------------|------------|
| Category | Percentage | Category | Percentage |
| elementary completed | 2 | less than grade 9 | 13.8 |
| secondary not completed | 19 | grades 9-11 | 28.2 |
| secondary completed | 33 | grades 12-13 | 31.6 |
| university (no degree) | 11 | some university | 11.1 |
| university (with degree) | 35 | university degree | 15.3 |

Ottawa-Hull Census Metropolitan Area (Ontario Part)

1971 Census of Canada Cat. #94-772, Volume III, Part 7, Table 2, the percentages represent the employed portion of the labour force.

T A B L E 4

DISTRIBUTION BY RELIGIOUS AFFILIATION

| Category | Percentage | Number |
|--------------------------|------------|--------|
| Protestant | 43 | 43 |
| Catholic | 47 | 47 |
| Other religion | 2 | 2 |
| No religious affiliation | 8 | 8 |
| TOTAL | 100 | 100* |

* N.B. There are three missing cases.

T A B L E 4 A

DISTRIBUTION BY RELIGIOUS AFFILIATION

| RESPONDENTS | | CENSUS | |
|--------------------------|------------|----------------|------------|
| Religion | Percentage | Religion | Percentage |
| protestant | 43 | Aggregation 1 | 33.2 |
| catholic | 47 | Roman Catholic | 60.5 |
| other religion | 2 | Aggregation 2 | 2.0 |
| no religious affiliation | 8 | No religion | 4.3 |

Aggregation 1 includes: Anglican, Baptist, Lutheran, Pentecostal, Presbyterian and United Church

Aggregation 2 includes: Greek Orthodox, Jewish, Salvation Army and other religions.

No other religions are identified in this census table.

Ottawa-Hull Census Metropolitan Area (Ontario Part)

1971 Census of Canada Cat. #95-745 (CT-15B).

T A B L E 5

TOTAL FAMILY INCOME DISTRIBUTION

| Category | Percentage | Number |
|-----------------------|------------|--------|
| Less than \$5,000 | 2.0 | 2 |
| \$5,000 to \$10,000* | 17.8 | 18 |
| \$10,000 to \$15,000* | 31.7 | 32 |
| \$15,000 to \$20,000* | 37.6 | 38 |
| Over \$20,000 | 10.9 | 11 |
| TOTAL | 100.0 | 101** |

* N.B. These categories are not strictly mutually exclusive for the sake of simplicity from the point of view of the respondent.

** N.B. There are two missing cases.

T A B L E 6

OCCUPATION DISTRIBUTION BY
TYPE OF EMPLOYER

| Occupation | Government non-flexitime | | Government flexitime | | Printing flexitime | | OC Transpo non-flexitime | |
|----------------|--------------------------|------|----------------------|------|--------------------|------|--------------------------|------|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Administration | 45.7 | (16) | 39.4 | (13) | 0.0 | | 35.3 | (6) |
| Office* | 5.7 | (2) | 9.1 | (3) | 0.0 | | 29.4 | (5) |
| Professional | 31.4 | (11) | 45.5 | (15) | 0.0 | | 11.8 | (2) |
| Skilled Worker | 8.6 | (3) | 0.0 | | 64.3 | (9) | 0.0 | |
| Supervisor | 8.6 | (3) | 6.1 | (2) | 35.7 | (5) | 23.5 | (4) |
| Column Total | 100.0 | (35) | 100.0 | (33) | 100.0 | (14) | 100.0 | (17) |

* N.B. "Office" indicates an office job other than administrative or supervisory

The most notable feature of the occupational distribution is that the fourteen people in the Printing group comprise only skilled workers and supervisors. Although the OC Transpo group comprises only 17.2% of the respondents, they represent half of the office category; this may be simply a reflection of the classification terminology popular in different work environments. A somewhat more significant distinction occurs in the two government groups. The one on flexitime is proportionally over represented in the office and professional categories but not in the administrative employees. The remaining two categories do not constitute a significant proportion of the government group. The sample seemed to be a fairly stable work force; fifty-nine out of 103 claimed to have been working for over fifteen years and twenty-eight had been working for the same employer for over fifteen years. Twenty-two had been with the same employer for between five and ten years, nineteen for between two and five years, eighteen for less than two years and thirteen for between five and ten years. As might be expected there is more turnover within the organization but still only thirty had been at the same job for less than two years. Twenty-seven were at the same job for between two and five years, and twenty for between five and ten years. The impression certainly appears to be that of a highly stable group of employees. There may be a bias in that for

the governmental employees, the terms "job" and employer" may have been defined in different ways i.e. some people may have interpreted employer as the Government of Canada whereas others may have interpreted employer as the department. This, unfortunately can't be verified. The pattern of responses is presented in tables 7, 8 and 9.

Preference for Change

Despite the low turnover as indicated by the data in tables 7, 8 and 9; the stability of the work force does not translate to high job satisfaction. The Job Satisfaction Index was calculated with a potential range of -36 to +36, with the negative values indicating relative dissatisfaction. The actual range was -29 to +16, and the mean and median were approximately -12. The quartile ranges were: -29 to +20, -19 to -13, -12 to -9 and -8 to +16.

One of the factors which may contribute to this relative dissatisfaction is the distribution of the hours of work. The questionnaire instructed respondents to answer the question, "Would you like to see a change in the way the work week is now set up?" if and only if at the time they were on neither flexitime nor on a compressed work week. The number of respondents that could be considered on

T A B L E 7

LENGTH OF TIME WORKING

| Category | Percentage | Number |
|--------------------------|------------|--------|
| less than 2 years* | 3.0 | 3 |
| between 2 and 5 years* | 11.9 | 12 |
| between 5 and 10 years* | 16.8 | 17 |
| between 10 and 15 years* | 9.9 | 10 |
| over 15 years | 58.4 | 59 |
| TOTAL | 100.0 | 101** |

* N.B. These categories are not strictly mutually exclusive for the sake of simplicity from the point of view of the respondent.

** N.B. There are two missing cases.

T A B L E 8

LENGTH OF TIME AT SAME EMPLOYER

| Category | Percentage | Number |
|--------------------------|------------|--------|
| less than 2 years | 15 | 18 |
| between 2 and 5 years* | 19 | 19 |
| between 5 and 10 years* | 27 | 22 |
| between 10 and 15 years* | 13 | 13 |
| over 15 years | 28 | 28 |
| TOTAL | 100 | 100** |

* N.B. See note on table 6.

** N.B. There are three missing cases.

T A B L E 9

LENGTH OF TIME AT SAME JOB

| Category | Percentage | Number |
|--------------------------|------------|--------|
| less than 2 years | 29.7 | 30 |
| between 2 and 5 years* | 26.7 | 27 |
| between 5 and 10 years* | 19.8 | 20 |
| between 10 and 15 years* | 10.9 | 11 |
| over 15 years | 12.9 | 13 |
| TOTAL | 100.0 | 101** |

* N.B. See note on table 6.

** N.B. There are two missing cases.

"regular working time" was 54. The answer options were: very much, yes, not sure, no and not at all. A cross tabulation of responses appears in table 10.

The Consumer and Corporate Affairs group is clearly dissatisfied with the status-quo and the OC Transpo group, although not eager for a change, would certainly not appear to be opposed. Overall more than three-quarters (76.6%) of the respondents on a "regular work week" would like to see a change and only 6.4% (3) were opposed.

When respondents who were on a regular work week were asked "If there were to be a change, would you prefer flexitime or compressed work week?" they had a choice of five answers: flexitime by far, flexitime, no preference, compressed work week, and compressed work week by far. The responses appear in table 11.

Overall the preference seems to be for flexitime. Ten percent expressed no preference, thirty-five percent sided with compressed work week and fifty-four percent with flexitime. The strength of the preference is skewed towards flexitime in that it is in the two extreme categories (by far) that a marked difference favouring flexitime exists; 25.0% versus 10.4%. This relationship seems to hold for both survey groups.

T A B L E 1 0

EMPLOYER GROUP BY DESIRE FOR CHANGE

| Employer Group | Desire for Change | | | | | TOTAL |
|------------------------------------|-------------------|------|----------|-------|------------|-------|
| | Very Much | Yes | Not Sure | No | Not at All | |
| Consumer and Corporate Affairs (N) | (15) | (15) | (3) | (2) | (0) | (35) |
| Row % | 42.9 | 42.9 | 8.6 | 5.7 | 0.0 | |
| Column % | 93.8 | 75.0 | 37.5 | 100.0 | 0.0 | 74.5 |
| OC Transpo (N) | (1) | (5) | (5) | (0) | (1) | (12) |
| Row % | 8.3 | 41.7 | 41.7 | 0.0 | 8.3 | |
| Column % | 6.3 | 25.0 | 62.5 | 0.0 | 100.0 | 25.5 |
| COLUMN TOTAL | (16) | (20) | (8) | (2) | (1) | (47)* |
| ROW TOTAL | 34.0 | 42.6 | 17.0 | 4.3 | 2.1 | 100.0 |

* N.B. When the desire for change question or the change preference question is cross tabulated with other questions, the total N frequently is less than 54 due to the fact that some people did not answer all the questions. Thus, in the case of table 10, out of 103 total respondents, 54 were not already on flexitime, but 2 out of 37 government employees and 5 out of 17 OC Transpo employees did not answer the question regarding the extent of their desire to see a change in the way that the work week was then set up. Subsequent tables have varying N's. The computer adjusted the percentages and tables by dropping the case in calculating the values for any table where a potential case failed to indicate an appropriate answer for one of the variables in that table.

T A B L E 1 1

EMPLOYER GROUP BY PREFERENCE FOR CHANGE

| Employer Group | Flexitime | | No Preference | Compressed Work Week | | TOTAL |
|------------------------------------|-----------|----------|---------------|----------------------|--------|-------|
| | by Far | Somewhat | | Somewhat | by Far | |
| Consumer and Corporate Affairs (N) | (8) | (10) | (4.0) | (8) | (5) | (35) |
| Row % | 22.9 | 28.6 | 11.4 | 22.9 | 14.3 | 72.9 |
| Column % | 66.7 | 71.4 | 80.0 | 66.7 | 100.0 | |
| OC Transpo (N) | (4) | (4) | (1) | (4) | (0) | (13) |
| Row % | 30.8 | 30.8 | 7.7 | 30.8 | 0.0 | 27.1 |
| Column % | 33.3 | 28.6 | 20.0 | 33.3 | 0.0 | |
| COLUMN TOTAL | (12) | (14) | (5) | (12) | (5) | (48) |
| ROW TOTAL | 25.0 | 29.2 | 10.4 | 25.0 | 10.4 | |

Differences between Preference Groups

The central question in this work relates to whether those who express these different preferences have different values. As a preliminary step a number of cross tabulations were performed on a number of variables which, on the face of it, appeared to have significance, namely, the number of children, leisure time activity, education, as well as age, sex, marital status, income, occupation, job satisfaction, religious affiliation and the expressed reason for the change preference.

Intuition could lead us to suspect that the existence of children may be a factor relating to preference. Respondents were asked in question number nine, "Do you have any children?" and a yes/no answer was required. Results are shown on Table 12. Although the table appears to indicate that the existence of children has a fairly strong correlation (significant at .05 level) there are too few cases for all cells to ensure validity. By ignoring the no preference and collapsing the other categories we obtain larger cell sizes. Table 13 presents this modification.

On the basis of the data in Table 13, it would not be possible to conclude the presence of any sort of casual relationship between the presence of children and whether people prefer the compressed or the flexible work schedule. Although 70% of those having children preferred flexitime

T A B L E 1 2

CHANGE PREFERENCE BY PRESENCE OF CHILDREN

| Preference | Yes/Children | No/Children | Row Total |
|-----------------------------------|--------------|-------------|-----------|
| Flexitime by Far | (11) | (1) | (12) |
| Row % | 91.7 | 8.3 | |
| Column % | 30.6 | 7.1 | 24.0 |
| Flexitime | (10) | (4) | (14) |
| Row % | 71.4 | 28.6 | |
| Column % | 27.8 | 28.6 | 28.0 |
| No pre- ference | (6) | (0) | (6) |
| Row % | 100.0 | 0.0 | |
| Column % | 16.7 | 0.0 | 12.0 |
| Compressed Work Week | (7) | (6) | (13) |
| Row % | 53.8 | 46.2 | |
| Column % | 19.4 | 42.9 | 26.0 |
| Compressed Work Week by Far | (2) | (3) | (5) |
| Row % | 40.0 | 60.0 | |
| Column % | 5.6 | 21.4 | 10.0 |
| COLUMN TOTAL | (36) | (14) | (50) |
| ROW % | 72.0 | 28.0 | 100.0 |

T A B L E 1 3

COLLAPSED CHANGE PREFERENCE BY PRESENCE OF CHILDREN

| Preference | Yes/Children | No/Children | Row Total |
|-------------------------|--------------|-------------|-----------|
| Flexitime | (21) | (5) | (26) |
| Row % | 80.8 | 19.2 | |
| Column % | 70.0 | 25.7 | 29.1 |
| Compressed Work Week | (9) | (9) | (18) |
| Row % | 50.0 | 50.0 | |
| Column % | 30.0 | 64.3 | 40.9 |
| COLUMN TOTAL | (30) | (14) | (44) |
| ROW % | 68.2 | 31.8 | 100.0 |

and 64.3% of those without children preferred the compressed work week schedule, when we look at the group preferring the latter 50% have children and 50% do not. By comparison, in the group preferring flexitime, 70% have children. A chi square of 4.72 indicates a significance at the .05 level but the strength of the relationship is not very strong. A suitable measure of association is the phi statistic which has a range of 0 to +1 for no relationship to a perfect relationship respectively. The phi statistic for this table computes to approximately 0.33. The conclusion is that children may be a pre-condition i.e. necessary but not sufficient variable, for the preference of flexitime but not a casual factor.

Another equally appealing explanatory factor might be the way that people spend their leisure time. The question read, "How do you spend your time off work? (Check only the ONE that occupies the MOST of your leisure time)". The impetus for this question originated in some preliminary interviews. Some of the people contacted said they unquestionably preferred the longer weekends because they like to hunt, travel, or fish. These activities required longer weekends. As one person said, it takes him one day to drive to a fishing spot where he can do some serious fishing and one day to come back. For him, obviously, a three or four day weekend would be a distinct asset. On the basis

of a number of people expressing a similar sentiment, the leisure time activity question was included in the questionnaire. Seven closed answers were provided with provision for another category along with a request for specification. Thirteen answer categories resulted. The pattern of answers for all the respondents is contained in Table 14. A cross tabulation of the more frequent leisure time activities by preference for flexitime or compressed work week appears in Table 15. The distribution of answers through the cells was so low that no real significance can be determined. It is however interesting to note that of the six respondents indicating "self improvement (taking courses or special training, studying, etc...)", one preferred flexitime and three preferred it by far.

Education also appeared as having some potential relevance. Respondents were asked to circle the highest level that they had attained; the choices were: grade school not finished, grade school finished, high school not finished, high school finished, university-no degree, and university degree. Cross tabulation produces the results in Table 16. The chi square is 11.3111 which is acceptable only to the 0.5025 level of significance and again the number of cases per cell is so small that relatively small changes could have dramatic effects. If we ignore "No preference" and collapse both axes we can reduce the number of cells to four as in Table 17.

TABLE 14

DISTRIBUTION OF LEISURE TIME ACTIVITY RESPONSES

| Category Category | All Respondents Percent (Number) | | Respondents Indi- cating a Preference Percent (Number) | |
|--------------------------------|-------------------------------------|-------|--|------|
| Hobbies* | 17.5 | (18) | 28 | (14) |
| Outdoors* | 20.4 | (21) | 24 | (12) |
| Religious activity* | 2.9 | (3) | 2 | (1) |
| Self- improvement* | 10.7 | (11) | 12 | (6) |
| Social activity* | 10.7 | (11) | 6 | (3) |
| Travel* | 1.9 | (2) | 2 | (1) |
| Family Life | 2.9 | (3) | 4 | (2) |
| Housework- maintenance | 4.9 | (5) | 4 | (2) |
| Musical activity | 1.9 | (2) | 2 | (1) |
| Literary (reading) | 2.9 | (3) | 2 | (1) |
| Individual sports only* | 5.8 | (6) | 0 | (0) |
| Team sports only* | 1.0 | (1) | 2 | (1) |
| Individual and team sports* | 3.9 | (4) | 6 | (3) |
| Multiple answers | 12.6 | (13) | 6 | (3) |
| TOTAL | 100.0 | (103) | 100 | (50) |

* N.B. Categories indicated with an asterisk were those answers specifically indicated in the questions. The remainder resulted from coding the answers filled in by respondents. In the case of the three sports categories, only a general "sports" answer was provided but the threefold distinction arose as a result of the request to "specify" the answer "sports".

T A B L E 1 5

CHANGE PREFERENCE BY SELECTED LEISURE TIME ACTIVITY

| Change Preference | Hobbies | Outdoors | Self-improvement | Social Activity | Sports |
|-----------------------------|-----------|-----------|------------------|-----------------|----------|
| Flexitime by Far | 3 | 3 | 3 | 0 | 0 |
| Flexitime | 5 | 2 | 1 | 1 | 1 |
| No Preference | 1 | 1 | 0 | 0 | 2 |
| Compressed Work Week | 4 | 5 | 1 | 1 | 1 |
| Compressed Work Week by Far | 1 | 1 | 1 | 1 | 0 |
| TOTAL | 14 | 12 | 6 | 3 | 4 |

T A B L E 1 6

CHANGE PREFERENCE BY EDUCATIONAL LEVEL

| Change Preference | High School Not Finished | High School Finished | University No Degree | University Degree | Row Total |
|-----------------------------|--------------------------|----------------------|----------------------|-------------------|-----------|
| Flexitime by Far | (1) | (7) | (3) | (1) | (12) |
| Row % | 8.3 | 58.3 | 25.0 | 8.3 | |
| Column % | 9.1 | 36.8 | 42.9 | 7.7 | 24.0 |
| Flexitime | (3) | (5) | (2) | (4) | (14) |
| Row % | 21.4 | 35.7 | 14.3 | 28.6 | |
| Column % | 27.3 | 26.3 | 28.6 | 30.8 | 28.0 |
| No Preference | (3) | (1) | (0) | (2) | (6) |
| Row % | 50.0 | 16.7 | 0.0 | 33.3 | |
| Column % | 27.3 | 5.3 | 0.0 | 14.4 | 12.0 |
| Compressed Work Week | (2) | (5) | (2) | (4) | (13) |
| Row % | 15.4 | 38.5 | 15.4 | 30.8 | |
| Column % | 18.2 | 26.3 | 28.6 | 30.8 | 26.0 |
| Compressed Work Week by Far | (2) | (1) | (0) | (2) | (5) |
| Row % | 40.0 | 20.0 | 0.0 | 40.0 | |
| Column % | 18.2 | 5.3 | 0.0 | 15.4 | 10.0 |
| COLUMN TOTAL | (11) | (19) | (7) | (13) | (50) |
| ROW TOTAL | 22.0 | 38.0 | 14.0 | 26.0 | 100.0 |

T A B L E . 1 7

CHANGE PREFERENCE BY EDUCATIONAL LEVEL
(BOTH COLLAPSED)

| Change Preference | High School | University | Row Total |
|----------------------|-------------|------------|-----------|
| Flexitime | (16) | (10) | (26) |
| Row % | 61.5 | 38.5 | |
| Column % | 61.5 | 55.5 | 59.1 |
| Compressed Work Week | (10) | (8) | (18) |
| Row % | 55.6 | 44.4 | |
| Column % | 38.5 | 44.4 | 40.9 |
| COLUMN TOTAL | (26) | (18) | (44) |
| ROW TOTAL | 59.1 | 40.9 | 100.0 |

The compressed data in table 17 produces a chi square value of 0.1570 which is significant only at the 0.70 level. The strength of the association as measured by the phi statistic is only 0.0597. This weak association between educational level and change preference precludes any significant relationship.

Income, usually associated with education does not explain the preference adequately. A cross tabulation of these two variables appears in table 18. Income was grouped into four ranges: \$5,000 to \$10,000; \$10,000 to \$15,000; \$15,000 to \$20,000; and over \$20,000. Respondents had to indicate their total family income in the previous year. No clear pattern exists with reference to flexitime as opposed to the compressed work week but among those expressing themselves in favour of the former there was a curious anomaly. Among those preferring flexitime by far, 66.3% fell into the two lower categories whereas among those expressing a less extreme preference for flexitime 64.3% fell into the upper two income levels. This could perhaps indicate that upper income groups perceive less of a need for flexitime because they may already have some discretion, albeit informal, whereas the lower income groups may perceive themselves as being under more pressure to "live by the clock".

T A B L E 1 8

CHANGE PREFERENCE BY INCOME LEVEL

| Change Preference | INCOME | | | | Row Total |
|-----------------------------|---------------------|----------------------|----------------------|---------------|-----------|
| | \$5,000 to \$10,000 | \$10,000 to \$15,000 | \$15,000 to \$20,000 | Over \$20,000 | |
| Flexitime by Far | | | | | |
| (Number) | (1) | (7) | (3) | (1) | (12) |
| Percent | 8.3 | 58.3 | 25.0 | 8.3 | 100.0 |
| Flexitime | | | | | |
| (Number) | (3) | (2) | (7) | (2) | (14) |
| Percent | 21.4 | 14.3 | 50.0 | 14.3 | 100.0 |
| Indifferent | | | | | |
| (Number) | (1) | (1) | (3) | (1) | (6) |
| Percent | 16.7 | 16.7 | 50.0 | 16.7 | 100.0 |
| Compressed Work Week | | | | | |
| (Number) | (3) | (3) | (4) | (2) | (12) |
| Percent | 25.0 | 25.0 | 33.3 | 16.7 | 100.0 |
| Compressed Work Week by Far | | | | | |
| (Number) | (1) | (2) | (1) | (1) | (5) |
| Percent | 20.0 | 40.0 | 20.0 | 20.0 | 100.0 |
| COLUMN TOTAL | | | | | |
| (Number) | (9) | (15) | (18) | (7) | (49) |
| Percent | 18.4 | 30.6 | 36.7 | 14.3 | 100.0 |

Occupation, which is often associated with income level and education, does not appear to have a significant relationship with change preference. The cross tabulation of these two variables is presented in table 19. Although no significant relationship exists between these two variables (chi square = 9.46 and significant at 0.8932) it is interesting that of the office workers, 71.5% have expressed a preference for flexitime to one degree or another. This compares with 42.1% for the administrative group and 50% for the professional group. These are the only three groups with any meaningful cell size.

Job satisfaction would appear to have some sort of role to play in the preferences people have. After the job satisfaction index was computed for individuals the distribution was collapsed into four categories based on quartile ranges. In the first quartile were the least satisfied and in the fourth were the most satisfied. The data is presented in table 20. These two extremes were the ones that were least likely to select a compressed work schedule as their desire. In fact only 20% of both of these extreme groups opted for the short work week whereas 80% of the first quartile and 70% of the fourth preferred flexitime. The differences between these two groups' expressions for flexitime i.e. moderate or strong, is not significant. The two middle groups in the second and third

TABLE 19

CHANGE PREFERENCE BY CURRENT OCCUPATION

| CHANGE PREFERENCE | OCCUPATION | | | | | ROW TOTAL |
|---------------------------------|----------------|--------|--------------|----------------|------------|-----------|
| | ADMINISTRATIVE | OFFICE | PROFESSIONAL | SKILLED WORKER | SUPERVISOR | |
| FLEXTIME BY FAR(N) | (2) | (3) | (3) | (2) | (2) | (12) |
| Row % | 16.7 | 25.0 | 25.0 | 16.7 | 16.7 | 25.0 |
| Column % | 10.5 | 42.9 | 21.4 | 50.0 | 50.0 | |
| FLEXTIME (N) | (6) | (2) | (4) | (1) | (1) | (14) |
| Row % | 42.9 | 14.3 | 28.6 | 7.1 | 7.1 | 29.2 |
| Column % | 31.6 | 28.6 | 28.6 | 25.0 | 25.0 | |
| NO PREFERENCE (N) | (2) | (1) | (2) | (1) | (0) | (6) |
| Row % | 33.3 | 16.7 | 33.3 | 16.7 | 0.0 | 12.5 |
| Column % | 10.5 | 14.3 | 14.3 | 25.0 | 0.0 | |
| COMPRESSED WORK WEEK (N) | (7) | (1) | (4) | (0) | (1) | (13) |
| Row % | 53.8 | 7.7 | 30.8 | 0.0 | 7.7 | 27.1 |
| Column % | 36.8 | 14.3 | 28.6 | 0.0 | 25.0 | |
| COMPRESSED WORK WEEK BY FAR (N) | (2) | (0) | (1) | (0) | (0) | (3) |
| Row % | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 6.3 |
| Column % | 10.5 | 0.0 | 7.1 | 0.0 | 0.0 | |
| COLUMN TOTAL | (19) | (7) | (14) | (4) | (4) | (48) |
| | 39.6 | 14.6 | 29.2 | 8.3 | 8.3 | 100.0 |

TABLE 20

CHANGE PREFERENCE BY GROUPED JOB SATISFACTION INDEX

| CHANGE PREFERENCE | JOB SATISFACTION | | | | ROW TOTAL |
|---|---------------------|---------------------|---------------------|---------------------|---------------|
| | 1ST QUARTILE | 2ND QUARTILE | 3RD QUARTILE | 4TH QUARTILE | |
| FLEXITIME BY FAR (N) Row % Column % | (3) 25.0 30.0 | (1) 8.3 5.9 | (4) 33.3 30.8 | (4) 33.3 40.0 | (12) 24.0 |
| FLEXITIME (N) Row % Column % | (5) 35.7 50.0 | (5) 35.7 29.4 | (1) 7.1 7.7 | (3) 21.4 30.0 | (14) 28.0 |
| NO PREFERENCE (N) Row % Column % | (0) 0.0 0.0 | (3) 50.0 17.6 | (2) 33.3 15.4 | (1) 16.7 10.0 | (6) 12.0 |
| COMPRESSED WORK WEEK (N) Row % Column % | (1) 7.7 10.0 | (6) 46.2 35.3 | (4) 30.8 30.8 | (2) 15.4 20.0 | (13) 26.0 |
| COMPRESSED WORK WEEK BY FAR(N) Row % Column % | (1) 20.0 10.0 | (2) 40.0 11.8 | (2) 40.0 15.4 | (0) 0.0 0.0 | (5) 10.0 |
| COLUMN TOTAL | (10) 20.0 | (17) 34.0 | (13) 26.0 | (10) 20.0 | (50) 100.0 |

quartile ranges of the Job Satisfaction Index were evenly balanced between their preferences for the two types of altered work weeks. A slight but interesting difference becomes apparent when looking at the intensity of these two groups' preferences for flexitime. Those in the second quartile prefer flexitime (moderately) five times as often as flexitime (by far) whereas for those in the third quartile, the preference reverses to a one to four ratio. Presumably, if one is almost happy with his job one is much more likely to want flexitime badly than when one almost hates one's job in which case one is more inclined to simply prefer flexitime moderately. This relationship is re-enforced by examining the row percentages. Of those preferring flexitime (moderately), 71.4% are in the two lower quartiles of the Job Satisfaction Index whereas of those preferring flexitime by far 66.6% are in the two upper quartiles. Thus we may say that preference for flexitime is likely to get stronger with greater job satisfaction. No similar pattern holds for those preferring the shorter work week. At best, what may be said is that those who fall into the middle range of the job satisfaction range tend to have a moderate preference for the compressed work week.

Age, oddly enough, does not seem to be a factor in the preference for hours of work. The ages of the respondents were grouped into five-year spans, with the exception

of the last category which was 55 to 63 years of age, and cross tabulated with change preference. The matrix is presented in table 21. The chi square of 21.246 indicates a relationship at the .8149 level of significance only. If we collapse the corner cells so that we have only two age categories, 20 to 40 and 41 to 63, and collapse the moderate and strong preferences for both flexitime and the compressed work week, we have a modified matrix such as in table 22. The relationship, albeit tenuous, appears to be that the relatively younger respondents prefer flexitime whereas the relatively older ones dislike the compressed work week.

Marital status although apparently not having a systematic relationship with change preference, the chi square is 9.754 at a significance level of 0.6376, is interesting in the case of married respondents. Table 23 indicates this as the largest marital status type, 41 out of 50. Clearly married people prefer flexitime. The indifferent group is relatively small 14.6% indicating a fair amount of decisiveness in the preference. Flexitime is somewhat preferred by 29.3% and much preferred by 24.4% whereas the compressed work week is somewhat preferred by 22% and much preferred by 9.8%. By aggregating the two levels of preference we have a balance of 53.7% preferring flexitime to one degree or another and 31.8% preferring the shorter work

TABLE 21

CHANGE PREFERENCE BY AGE GROUP

| CHANGE PREFERENCE | AGE GROUP | | | | | | | | ROW TOTAL |
|--------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-----------|
| | 20-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-63 | |
| FLEXITIME BY FAR (N) | (1) | (2) | (3) | (2) | (1) | (1) | (1) | (1) | (12) |
| Total % | 2.0 | 4.0 | 6.0 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 24.0 |
| FLEXITIME(N) | (0) | (4) | (2) | (2) | (4) | (1) | (1) | (0) | (14) |
| Total % | 0.0 | 8.0 | 4.0 | 4.0 | 8.0 | 2.0 | 2.0 | 0.0 | 28.0 |
| NO PREFERENCE(N) | (1) | (0) | (2) | (1) | (0) | (1) | (0) | (1) | (6) |
| Total % | 2.0 | 0.0 | 4.0 | 2.0 | 0.0 | 2.0 | 0.0 | 2.0 | 12.0 |
| COMPRESSED WORK WEEK(N) | (3) | (2) | (0) | (2) | (1) | (4) | (0) | (1) | (13) |
| Total % | 6.0 | 4.0 | 0.0 | 4.0 | 2.0 | 8.0 | 0.0 | 2.0 | 26.0 |
| COMPRESSED WORK WEEK BY FAR(N) | (1) | (1) | (1) | (0) | (1) | (1) | (0) | (0) | (5) |
| Total % | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 0.0 | 10.0 |
| COLUMN TOTAL | (6) | (9) | (8) | (7) | (7) | (8) | (2) | (3) | (50) |
| | 12.0 | 18.0 | 16.0 | 14.0 | 14.0 | 16.0 | 4.0 | 6.0 | 100.0 |

T A B L E 2 2

CHANGE PREFERENCE BY AGE (BOTH COLLAPSED)

| CHANGE PREFERENCE | AGE GROUP | | |
|-------------------------------------|--------------|--------------|---------------|
| | 20 to 40 | 41 to 63 | TOTAL |
| FLEXITIME (N) Total % | (16) 32.0 | (10) 20.0 | (26) 52.0 |
| NO PREFERENCE (N) Total % | (4) 8.0 | (2) 4.0 | (6) 12.0 |
| COMPRESSED WORK WEEK (N) Total % | (10) 20.0 | (8) 16.0 | (18) 36.0 |
| TOTAL (N) TOTAL % | (30) 60.0 | (20) 40.0 | (50) 100.0 |

TABLE 23

CHANGE PREFERENCE BY MARITAL STATUS

| CHANGE PREFERENCE | MARITAL STATUS | | | | |
|---|----------------|--------------|-----------------------|--------------|---------------|
| | SINGLE | MARRIED | DIVORCED OR SEPARATED | WIDOWED | TOTAL |
| FLEXITIME BY FAR (N) Column % | (1) 20.0 | (10) 24.4 | (1) 33.3 | (0) 0.0 | (12) 24.0 |
| FLEXITIME (N) Column % | (1) 20.0 | (12) 29.3 | (1) 33.3 | (0) 0.0 | (14) 28.0 |
| NO PREFERENCE (N) Column % | (0) 0.0 | (6) 14.6 | (0) 0.0 | (0) 0.0 | (6) 12.0 |
| COMPRESSED WORK WEEK(N) Column % | (3) 60.0 | (9) 22.0 | (0) 0.0 | (1) 100.0 | (13) 26.0 |
| COMPRESSED WORK WEEK BY FAR (N) Column % | (0) 0.0 | (4) 9.8 | (1) 33.3 | (0) 0.0 | (5) 10.0 |
| COLUMN TOTAL | (5) 10.0 | (41) 82.0 | (3) 6.0 | (1) 2.0 | (50) 100.0 |

week. The small cell sizes for single, divorced or separated and widowed respondents makes any conclusions unreliable.

Religious affiliation may have a very slight relationship with preference for hours of work. Only the Protestant and Catholic categories had any significant cell sizes and the distribution patterns for these two were not significantly different. The table as a whole with a chi square of 10.145 was significant at the 0.6032 level only. From table 24 we see that whereas only 30% of those expressing a Protestant religious affiliation preferred the compressed work week to any degree, 37.5% of Catholics opted for it. It is among those that prefer the compressed work week by far that there is an interesting difference. No Protestants had this preference but 16.7% of the Catholics did. The indication is that Catholics are somewhat more likely to prefer the shorter work week.

The most ubiquitous social variable, sex, does not indicate any significant relationship with preference for either form of altered work week. From table 25 we may conclude that both sexes have fairly similar distribution patterns. At best there may be a slight preference among females for flexitime to one degree or another but a shift of one to indifference would make the distribution virtually the same as that of the males.

TABLE 24

CHANGE PREFERENCE BY RELIGIOUS AFFILIATION

| CHANGE PREFERENCE | RELIGION | | | | ROW TOTAL |
|--|--------------|--------------|-----------------|-------------|---------------|
| | PROTESTANT | CATHOLIC | OTHER RELIGIONS | NO RELIGION | |
| FLEXITIME BY FAR (N) Column% | (4) 20.0 | (6) 25.0 | (0) 0.0 ✓ | (2) 50.0 | (12) 24.5 |
| FLEXITIME Column % | (7) 35.0 | (6) 25.0 | (1) 100.0 | (0) 0.0 | (14) 28.6 |
| NO PREFERENCE (N) Column % | (3) 15.0 | (3) 12.5 | (0) 0.0 | (0) 0.0 | (6) 12.2 |
| COMPRESSED WORK WEEK (N) Column % | (6) 30.0 | (5) 20.8 | (0) 0.0 | (1) 25.0 | (12) 24.5 |
| COMPRESSED WORK WEEK BY FAR(N) Column % | (0) 0.0 | (4) 16.7 | (0) 0.0 | (1) 25.0 | (5) 10.2 |
| COLUMN TOTAL | (20) 40.8 | (24) 49.0 | (1) 2.0 | (4) 8.2 | (49) 100.0 |

TABLE 25

CHANGE PREFERENCE BY SEX

| CHANGE PREFERENCE | SEX | | |
|--------------------------------|-----------------|---------------|----------------|
| | FEMALE % (N) | MALE % (N) | TOTAL % (N) |
| FLEXITIME BY FAR | 20.0 (2) | 75.0 (10) | 24.0 (12) |
| FLEXITIME | 40.0 (4) | 25.0 (10) | 28.0 (14) |
| NO PREFERENCE | 0.0 (0) | 15.0 (6) | 12.0 (6) |
| COMPRESSED WORK WEEK | 30.0 (3) | 25.0 (10) | 26.0 (13) |
| COMPRESSED WORK WEEK BY FAR | 10.0 (1) | 10.0 (4) | 10.0 (5) |
| TOTAL | 100.0 (10) | 100.0 (40) | 100.0 (50) |

We may conclude that preference for flexitime or compressed work week, on the basis of the data, cannot be strongly associated with the obvious sociological variables.

Reasons for Preferences

As a possible final easy solution we may refer to the reasons cited by respondents for their preferences. The third question in Part I asked, "...why do you have this preference? How would the change or no change benefit you personally?" This question was completely open-ended. Only 41 respondents furnished answers. The coding scheme and frequencies are presented in table 26 and cross tabulated with change preference. There are so many void cells that tests such as the chi square are inappropriate but some insight may be gained by examining the counts for each cell.

The types of reasons that seem to be associated with the compressed work schedule are: more time for the family and personal needs, more time for travel and housework, and to some extent travel to and from work. The reasons that can be related to a preference for flexitime are: travel to and from work, convenience for appointments and business hours, a dislike of long work days, general flexibility and convenience, and to lesser extents more time for personal and family needs and more for travel and housework.

TABLE 26

CHANGE PREFERENCE BY WHY THIS PREFERENCE?

| WHY THIS PREFERENCE? | CHANGE PREFERENCE | | | | | ROW TOTAL |
|---|-------------------|--------------|---------------|----------------------|-----------------------------|---------------|
| | FLEXITIME BY FAR | FLEXITIME | NO PREFERENCE | COMPRESSED WORK WEEK | COMPRESSED WORK WEEK BY FAR | |
| TRAVEL TO AND FROM WORK | (2) | (4) | (2) | (1) | (1) | (10) 25.0 |
| CONVENIENCE | (0) | (1) | (0) | (0) | (0) | (1) 2.5 |
| NO CHANGE OR BENEFIT | (0) | (2) | (1) | (0) | (0) | (3) 7.5 |
| PERSONAL, MORE TIME FOR FAMILY | (0) | (2) | (0) | (3) | (1) | (6) 15.0 |
| MORE EFFICIENT | (1) | (0) | (0) | (0) | (1) | (2) 5.0 |
| SEX | (1) | (0) | (0) | (0) | (0) | (1) 2.5 |
| MORE TIME FOR TRAVEL, HOUSEWORK | (2) | (0) | (0) | (2) | (2) | (6) 15.0 |
| CONVENIENCE FOR APPOINTMENTS BUSINESS HOURS | (2) | (0) | (0) | (1) | (0) | (3) 7.5 |
| DISLIKE LONG DAY | (1) | (1) | (0) | (0) | (0) | (2) 5.0 |
| INDECISIVE | (0) | (0) | (2) | (0) | (0) | (2) 5.0 |
| FLEXIBILITY | (1) | (3) | (0) | (0) | (0) | (4) 10.0 |
| COLUMN TOTAL | (10) 25.0 | (13) 32.5 | (5) 12.5 | (7) 17.5 | (5) 12.5 | (40) 100.0 |

Overall the reason cited most frequently was travel to and from work. Presumably those who have long commuting distances would prefer a four day week whereas flexitime would be of proportionately more benefit to those who live within normal commuting distance and have rush hours to contend with. The next two most frequent categories both deal with the notion of "more time" whether for personal or family needs or for travel or housework. Both of these are cited twice as often with reference to the compressed work week than with reference to flexitime. This supports the notion that the compressed work week appears to create more usable time i.e. for purposes other than work. Flexitime by comparison appears to be based on the idea of flexibility, convenience, and short days.

Limitations of Cross Tabulation

A larger sample would have permitted a greater analysis of these variables with respect to how they influence preferences regarding altered work weeks. In the cross tabulations the cell counts were quite small and many cells were empty rendering any conclusions on tests such as the chi square at best tenuous. More sophisticated measures would be equally questionable. An attempt was made to use regression analysis but when the rigorous case-wise deletion was specified there was not a sufficient number of cases to print a valid matrix.

A regression equation could have been forced using pair-wise deletion but the results would have been unreliable.

Value Survey

The value survey administered as Part II of the questionnaire does offer a solution to the problem. Presumably all the various biographical factors play some sort of role in the development of the value hierarchies of individuals. The precise nature of this relationship need not be of concern here as this would be beyond the scope of this study.

As a preliminary step the mean ranks assigned to each Terminal and Instrumental value by each of the five change preference groups were calculated and are presented in tables 27 and 28.

The next step was to determine whether the value hierarchies of the five groups were significantly different. Kendall's Coefficient of Concordance (w) was calculated for both terminal and instrumental values for each of the five groups, among the five groups, and for the five groups aggregated.

T A B L E 2 7

MEAN RANK OF TERMINAL VALUES BY CHANGE PREFERENCE GROUP

| <u>TERMINAL VALUE</u> | <u>CHANGE PREFERENCE GROUP</u> | | | | |
|---|--------------------------------|------------------|--------------------|-----------------------------|------------------------------------|
| | <u>FLEXITIME BY FAR</u> | <u>FLEXITIME</u> | <u>INDIFFERENT</u> | <u>COMPRESSED WORK WEEK</u> | <u>COMPRESSED WORK WEEK BY FAR</u> |
| 1- A COMFORTABLE LIFE (a prosperous life) | 5.50 | 7.36 | 8.50 | 7.31 | 5.60 |
| 2- AN EXCITING LIFE (a stimulating, active life) | 11.50 | 9.07 | 11.33 | 11.38 | 16.00 |
| 3- A SENSE OF ACCOMPLISHMENT (lasting contribution) | 7.75 | 5.07 | 8.67 | 5.85 | 6.20 |
| 4- A WORLD AT PEACE (free of war and conflict) | 8.75 | 8.71 | 9.67 | 7.77 | 8.20 |
| 5- A WORLD OF BEAUTY (beauty of nature and the arts) | 13.17 | 12.07 | 11.67 | 13.15 | 11.80 |
| 6- EQUALITY (brotherhood, equal opportunity for all) | 12.25 | 12.57 | 12.33 | 10.77 | 9.80 |
| 7- FAMILY SECURITY (taking care of loved ones) | 3.3 | 3.86 | 2.67 | 5.23 | 6.00 |
| 8- FREEDOM (independence, free choice) | 6.58 | 8.57 | 6.83 | 8.38 | 11.60 |
| 9- HAPPINESS (contentedness) | 4.42 | 5.07 | 4.67 | 6.92 | 3.40 |
| 10- INNER HARMONY (freedom from inner conflict) | 8.17 | 8.71 | 8.50 | 9.38 | 6.00 |
| 11- MATURE LOVE (sexual and spiritual intimacy) | 9.50 | 8.64 | 8.17 | 10.77 | 10.20 |

T A B L E 2 7 (Cont'd)

| <u>TERMINAL VALUE</u> | <u>CHANGE PREFERENCE GROUP</u> | | | | |
|---|--------------------------------|------------------|--------------------|-----------------------------|------------------------------------|
| | <u>FLEXITIME BY FAR</u> | <u>FLEXITIME</u> | <u>INDIFFERENT</u> | <u>COMPRESSED WORK WEEK</u> | <u>COMPRESSED WORK WEEK BY FAR</u> |
| 12- NATIONAL SECURITY (protection from attack) | 14.58 | 13.93 | 11.83 | 12.69 | 11.60 |
| 13- PLEASURE (an enjoyable, leisurely life) | 10.42 | 13.29 | 11.50 | 13.31 | 12.40 |
| 14- SALVATION (saved, eternal life) | 17.08 | 14.57 | 9.17 | 13.54 | 15.80 |
| 15- SELF-RESPECT (self-esteem) | 6.83 | 8.64 | 10.33 | 5.77 | 8.40 |
| 16- SOCIAL RECOGNITION (respect, admiration) | 13.50 | 12.50 | 15.00 | 14.15 | 11.40 |
| 17- TRUE FRIENDSHIP (close companionship) | 9.08 | 9.36 | 10.50 | 7.08 | 9.20 |
| 18- WISDOM (a mature understanding of life) | 8.58 | 9.00 | 9.67 | 7.54 | 7.40 |

T A B L E - 28

MEAN RANK OF INSTRUMENTAL VALUES BY CHANGE PREFERENCE GROUP

| <u>INSTRUMENTAL VALUE</u> | <u>CHANGE PREFERENCE GROUP</u> | | | | |
|---|--------------------------------|------------------|--------------------|---------------------------------|--|
| | <u>FLEXITIME BY FAR</u> | <u>FLEXITIME</u> | <u>INDIFFERENT</u> | <u>COMPRESSED WORK WEEK</u> | <u>COMPRESSED WORK WEEK BY FAR</u> |
| 1- AMBITIOUS (hard-working, aspiring) | 8.00 | 9.93 | 8.83 | 6.54 | 6.00 |
| 2- BROADMINDED (open-minded) | 5.50 | 9.00 | 9.17 | 8.31 | 10.80 |
| 3- CAPABLE (competent, effective) | 5.75 | 9.07 | 7.83 | 6.08 | 7.00 |
| 4- CHEERFUL (lighthearted, joyful) | 10.17 | 9.14 | 8.67 | 8.54 | 11.00 |
| 5- CLEAN (neat, tidy) | 11.42 | 10.43 | 10.67 | 12.08 | 9.60 |
| 6- COURAGEOUS (standing up for your beliefs) | 8.42 | 9.64 | 7.17 | 9.31 | 9.80 |
| 7- FORGIVING (willing to pardon others) | 11.58 | 9.07 | 9.33 | 8.92 | 11.20 |
| 8- HELPFUL (working for the welfare of others) | 12.50 | 8.86 | 10.17 | 10.77 | 9.20 |
| 9- HONEST (sincere, truthful) | 6.83 | 4.14 | 4.50 | 3.23 | 3.40 |
| 10- IMAGINATIVE (daring, creative) | 9.58 | 12.71 | 11.33 | 12.00 | 12.00 |
| 11- INDEPENDENT (self-reliant, self-sufficient) | 8.17 | 10.79 | 10.17 | 13.31 | 15.80 |

TABLE 28 (Cont'd)

| INSTRUMENTAL VALUE | CHANGE PREFERENCE GROUP | | | | |
|---|-----------------------------|------------------|--------------------|---------------------------------|--|
| | <u>FLEXITIME BY FAR</u> | <u>FLEXITIME</u> | <u>INDIFFERENT</u> | <u>COMPRESSED WORK WEEK</u> | <u>COMPRESSED WORK WEEK BY FAR</u> |
| 12- INTELLECTUAL (intelligent, reflective) | 8.67 | 11.36 | 10.00 | 10.77 | 8.20 |
| 13- LOGICAL (consistent, rational) | 7.67 | 9.79 | 8.33 | 8.62 | 9.00 |
| 14- LOVING (affectionate, tender) | 12.08 | 6.79 | 11.67 | 10.77 | 9.80 |
| 15- OBEDIENT (dutiful, respectful) | 16.42 | 17.79 | 14.00 | 13.92 | 13.60 |
| 16- POLITE (courteous, well-mannered) | 11.75 | 10.00 | 11.35 | 10.85 | 12.60 |
| 17- RESPONSIBLE (dependable, reliable) | 5.92 | 6.14 | 5.00 | 5.92 | 4.80 |
| 18- SELF-CONTROLLED (restrained, self- disciplined) | 10.58 | 11.36 | 12.83 | 11.08 | 7.80 |

Level of Agreement Within Groups

Kendall's Coefficient of Concordance is an indicator of the amount of agreement there is between a number of judges (K) ranking a number of objects (N). The test serves the same purposes as Spearman's Rank Order Coefficient or Kendall's Tau but permits comparison of more than two rank orderings. The relative amounts of agreement within each of the five change preference groups with respect to both terminal and instrument values can be found in table 29. As might have been expected, the amount of agreement in the rank ordering is lowest for those with no preference and gets progressively higher with those expressing a moderate preference and then a strong preference. This symmetry holds for both terminal and instrumental values. A somewhat unexpected finding is that in every one of the five groups there is more agreement on the rank orderings of terminal values than there is for instrumental values. Thus, regardless of whether they prefer flexitime or the compressed work week, people seem to agree more on what things are worth striving to achieve than on how to achieve these goals. This may be an indication that terminal values are more fundamental than or come prior to instrumental values i.e. one can't decide on how to achieve one's goals until one knows how to rank one's goals in order of priority.

T A B L E 2 9

LEVEL OF AGREEMENT IN
RANK ORDER OF VALUES WITHIN
CHANGE PREFERENCE GROUPS

| | Flexitime by Far | Flexitime | No Pre- ference | Compressed Work Week | Compressed. Work Week by Far | Overall (all five groups) |
|-----------------------------|---------------------|-----------|--------------------|-------------------------|------------------------------------|---------------------------------|
| Terminal Values | 0.4687 | 0.3393 | 0.2875 | 0.3172 | 0.4208 | 0.3101 |
| Instru- mental Values | 0.2838 | 0.1642 | 0.2093 | 0.2728 | 0.3395 | 0.1783 |

An examination of the Coefficients of Concordance in table 29 shows that in most of the change preference groups there is higher agreement in the rank ordering of both terminal and instrumental values than there is overall i.e. when all five change preference groups are combined and considered as one. Out of the ten cells the two exceptions are those expressing no preference who scored lower agreement on terminal values and those who expressed a moderate preference for flexitime, who scored lower on instrumental values.

The implication is that there is indeed a relationship between value hierarchies and preference for change. From table 29 we may conclude that there is agreement within the groups, generally higher than the overall agreement, but we cannot conclude that the groups, as groups, have different value hierarchies.

Level of Agreement Between Groups

Using the mean ranks of each of the value sets, as in tables 27 and 28, the Coefficient of Concordance was calculated to obtain the amount of agreement between the five preference groups. In table 30 the between group agreement is compared with the overall agreement. We see from this table that the agreement in the ranking of terminal values is actually slightly lower (0.2958 versus 0.3101) between groups (0.1850 versus 0.1783) than overall. This gives us a hint

T A B L E 3 0

LEVEL OF AGREEMENT IN RANK ORDER OF VALUES
BETWEEN CHANGE PREFERENCE GROUPS
AND OVERALL

| | Coefficient on Concordance | | |
|---------------------|----------------------------|---------------------------|------------|
| | Between Groups | Overall (All Five Groups) | Difference |
| Terminal Values | 0.2958 | 0.3101 | 0.0143 |
| Instrumental Values | 0.1850 | 0.1783 | 0.0067 |

that there is perhaps a stronger relationship between change preference and instrumental values than between change preference and terminal values.

The differences in the Coefficients of Concordance for both terminal and instrumental values are so small, 0.0143 and 0.0067 respectively, that one might be tempted to reject the hypothesis and conclude that there is no difference in the value hierarchies between those preferring flexitime and those preferring the compressed work week.

Establishing Independence of Values

Rather than reject the hypothesis, an explanation was proposed. The value survey was designed to tap many aspects of each individual's value hierarchy. The preference for the type of hours of work clearly does not relate to all values but more probably to only a few. The problem then became that there was sufficient overall agreement on most values that the disagreement on those values pertaining to a preference for hours of work was masked by the agreement on the other values. Before attempting to identify the values relevant to preferring flexitime or compressed work week it was decided that the independence of the items in the value survey should be established. It had to be demonstrated that each of the eighteen items in the two sets of values were so

different from each other that it was likely that only a few of the items would show any difference in rank ordering between preference groups.

In order to ascertain the independence of the items in the Value Survey a factor analysis was performed. Even after reducing the number of factors to six, the eigenvalues and percentage of variation accounted for by the factors are not very high. The results of these factor analyses are presented in table 31. Although no clear guidelines exist for determining the independence of the value items the significance can be inferred by comparing the figures for the terminal and instrumental values with those obtained from a factor analysis on eighteen items in the job satisfaction survey. The eighteen items were each supposed to measure the same concept, job satisfaction. The result of the factor analysis after reducing to four factors are presented in table 32. Clearly the items in the value survey are dramatically less interrelated than the items in the job satisfaction survey. Both measures of the importance of a factor, eigenvalue and percentage of variation, indicate that the eighteen items in the Job Satisfaction Index have a lot of overlap whereas the items in the value survey are quite independent.

TABLE 31

FACTOR ANALYSIS OF TERMINAL AND INSTRUMENTAL VALUES

TERMINAL VALUES

| <u>Factor</u> | <u>Eigenvalue</u> | <u>Percentage of Variation</u> | <u>Cumulative Percentages</u> |
|---------------|-------------------|--------------------------------|-------------------------------|
| 1 | 2.61586 | 24.4 | 24.4 |
| 2 | 2.25407 | 21.0 | 45.4 |
| 3 | 1.86578 | 17.4 | 62.8 |
| 4 | 1.63891 | 15.3 | 78.1 |
| 5 | 1.19222 | 11.1 | 89.2 |
| 6 | 1.15308 | 10.8 | 100.0 |

INSTRUMENTAL VALUES

| | | | |
|---|---------|------|-------|
| 1 | 3.37102 | 30.3 | 30.3 |
| 2 | 2.45107 | 22.0 | 52.3 |
| 3 | 1.48938 | 13.4 | 65.7 |
| 4 | 1.44007 | 12.9 | 78.6 |
| 5 | 1.29488 | 11.6 | 90.3 |
| 6 | 1.08108 | 9.7 | 100.0 |

T A B L E 3 2

FACTOR ANALYSIS OF
JOB SATISFACTION INDEX

| Factor | Eigenvalue | Percentage of Variation | Cumulative Percentages |
|--------|------------|----------------------------|---------------------------|
| 1 | 7.71136 | 72.4 | 72.4 |
| 2 | 1.18313 | 11.1 | 83.5 |
| 3 | 1.02406 | 9.6 | 93.1 |
| 4 | 0.73020 | 6.9 | 100.0 |

Identifying Relevant Values

The next step was to identify which of the items in the value survey were relevant to the preference for hours of work. The technique used was discriminant analysis. The terminal values identified as the best predictors of group membership, in order, are presented in table 33. Based on these seven values it was possible to obtain a "hit-ratio" of 50% i.e. it was possible to predict the person's group or change preference half of the time as opposed to the statistical probability of 20% of the time, one in five.

As might be expected instrumental values did even better with a "hit-ratio" of 62.0%. This supports the idea that the structure of the hours of work is seen as a means of achieving various goals. The instrumental values selected are presented in table 34.

Establishing Significance of Values

Furthermore we may state that even though individuals may have relatively similar value hierarchies, we are able to predict their preference for flexitime or the compressed work week on the basis of how they rank a small subset of their instrumental values.

T A B L E 3 3

TERMINAL VALUES IDENTIFIED AS
PREDICTORS OF CHANGE PREFERENCE

| | <u>F to Enter or Remove</u> | <u>Wilks' Lambda</u> |
|---|---------------------------------|--------------------------|
| 1. Salvation (saved eternal life) | 3.17347 | 0.77998 |
| 2. An exciting life | 2.46850 | 0.63702 |
| 3. Freedom (independence, free choice) | 1.49917 | 0.55906 |
| 4. Family security (taking care of loved ones) | 1.76256 | 0.47870 |
| 5. Pleasure (an enjoyable, leisurely life) | 1.13474 | 0.43099 |
| 6. Self-respect (self-esteem) | 1.35050 | 0.37071 |
| 7. True friendship (close companionship) | 1.30905 | 0.33476 |

T A B L E 3 4

INSTRUMENTAL VALUES IDENTIFIED AS
PREDICTORS OF CHANGE PREFERENCE

| | <u>F to Enter or Remove</u> | <u>Wilks' Lambda</u> |
|--|---------------------------------|--------------------------|
| 1. Independent (self-reliant, self-sufficient) | 3.51648 | 0.76186 |
| 2. Loving (affectionate, tender) | 2.44382 | 0.62337 |
| 3. Broadminded (open-minded) | 1.60990 | 0.54217 |
| 4. Polite (courteous, well mannered) | 1.94108 | 0.45758 |
| 5. Self-controlled (restrained, self-disciplined) | 1.47246 | 0.40011 |
| 6. Forgiving (willing to pardon others) | 1.18436 | 0.35774 |
| 7. Helpful (working for the welfare of others) | 1.19913 | 0.31856 |

Having identified five groups on the basis of change preference the computer was able to generate four discriminant functions. We can judge the relative importance of instrumental values by examining how heavily they load onto these factors.

The table of discriminant functions, table 35, clearly indicates that the third and fourth functions are useless. Before any functions were removed the lambda was 0.3186. This indicates that considerable discriminating power exists in the variables being used (the larger the lambda is, the less discriminating power is present) (Nie, 1975, page 440). After some of this discriminating power has been placed in the first function, lambda increases, and the chi square tells us that the statistical significance of this second function is substantially less than that of the first.

The table of standardized discriminant function coefficients, table 36, indicates the relative contributions of the six discriminating variables to the four functions. The loading factors of the variable "independent" on the first two functions, the two significant functions, are 0.74534 and 0.56618 respectively. The loading factors of the variable "loving" are 0.55142 and 0.76441 respectively. The loading factors are similar, only reversed, but the significance of the first function is much higher than that of the second function, 0.0008 and 0.231 respectively. Thus

T A B L E 3 5

DISCRIMINANT FUNCTIONS

| Discriminant Function | Eigen- Value | Relative Percentage | Functions Derived | Wilk's Lambda | Chi Square | Significance |
|--------------------------|-----------------|------------------------|----------------------|------------------|---------------|--------------|
| 1 | 0.88086 | 59.80 | 0 | 0.3186 | 49.189 | 0.008 |
| 2 | 0.42944 | 29.16 | 1 | 0.5992 | 22.025 | 0.231 |
| 3 | 0.12201 | 8.28 | 2 | 0.8565 | 6.662 | 0.757 |
| 4 | 0.04061 | 2.76 | 3 | 0.9610 | 1.712 | 0.789 |

T A B L E 3 6

STANDARDIZED DISCRIMINANT
FUNCTION COEFFICIENTS

| | F u n c t i o n | | | |
|-----------------|-----------------|----------|----------|----------|
| | 1 | 2 | 3 | 4 |
| Broadminded | -0.52547 | -0.11418 | -0.13830 | 0.44933 |
| Forgiving | -0.45642 | 0.07277 | 0.59596 | 0.22085 |
| Helpful | 0.25619 | -0.48063 | -0.18116 | -0.63076 |
| Independent | -0.74534 | -0.56618 | -0.34737 | -0.33328 |
| Loving | 0.55142 | -0.76441 | -0.23016 | 0.39257 |
| Polite | -0.27063 | -0.66446 | 0.10325 | 0.47871 |
| Self-controlled | -0.38579 | 0.09297 | -0.67812 | 0.21706 |

clearly the instrumental variable "independent" plays a big role. The importance that an individual places on this variable, in terms of how he wants to achieve his goals, will significantly determine whether he prefers flexitime or the compressed work week and to what extent.

CHAPTER IV

CONCLUSIONS

The respondents average age was 39 and the average family income was around \$12,000. The group seems to be a fairly stable work force with a low job turnover rate but this does not translate into a high job satisfaction score. Most people were somewhat dissatisfied with their jobs.

One of the factors that may contribute to this dissatisfaction is the structure of the hours of work. Among those on a "regular work week", 76.6% desire a change in the hours of work. This same group seem to prefer flexitime; 54% preferred flexitime to one degree or another and 35% preferred the compressed work week.

Examining the change preference in terms of the biographical variables, a number of possible indications arise. The presence of children clearly seems to be associated with a desire for flexitime and the lack of children is somewhat more weakly associated with the preferences for the compressed work week. The strength of this relationship cannot be shown to be significant. No leisure time activity appears to be clearly associated

with either form of altered work week although among those who spend their leisure time on hobbies and self-improvement there may be a slight preference for flexitime. Education appears to be irrelevant. Income has no effect on preferences for either of the two alternatives but those who prefer flexitime moderately tend to have higher incomes than those who prefer it by far. Occupational groups do not seem to influence the change preference with the exception of office workers who do like flexitime more than the alternatives.

Job satisfaction appears to have a curious relationship with change preference. Those who are most and least satisfied with their jobs seem to prefer flexitime to one degree or another. Those who fall into the two middle quartiles of the range of the Job Satisfaction Index, seem to prefer the compressed work week but only to a moderate degree. The significance of this relationship is not clear and is further confused by the fact that among those preferring flexitime lower job satisfaction is associated with a moderate degree of preference whereas higher job satisfaction is associated with a stronger preference.

Age may be a marginally significant factor affecting change preference but on the basis of this sample it seems that the relatively younger respondents favour flexitime.

Married people seem to prefer flexitime by a significant degree. Religion does not appear to be a factor except that Catholics may be more apt to prefer the compressed work week by far than Protestants. Finally, both sexes seem to have essentially similar preference distributions.

All of the foregoing, albeit tenuous and inconclusive, may be summarized as follows. Those preferring flexitime tend to be somewhat younger, married, and with children. They tend to be either the most or the least satisfied with their jobs and spend their leisure time on hobbies or self-improvement. If their income is relatively high then they are more apt to prefer flexitime by far whereas if their income is relatively low their preference is more likely to be moderate.

Those preferring the compressed work week are relatively older, have a variety of marital statuses but tend not to have children. Among the work related issues the only one that seems significant is that this group seems to fall in the middle range on Job Satisfaction Index and the degree of their preference tends to be moderate.

The data base does not permit the foregoing

relationships to be asserted with a high level of significance. By assuming that the various biographical and work related variables somehow affect an individual's hierarchic ordering of basic instrumental and terminal values we are able to test whether or not preference for flexitime or the compressed work week is a predictable attitude.

It was hypothesized that the preference for flexitime or the compressed work week was an attitude based on one's value hierarchy. The hypothesis was tested in the null form. Rokeach's Value Survey was administered and it was found that on the basis of Kendall's Coefficient of Concordance we could not reject the null hypothesis. Further clarification was obtained by applying factor analysis to the two sets of values. It was determined that, with comparison to the items in the Job Satisfaction Survey, each of the eighteen items in both sets of values, terminal and instrumental, referred to a significantly different value. Therefore, it became obvious that the change preference with respect to an altered work week would not relate to all eighteen items of both sets of values. When the level of agreement between groups was found to be not different from the level of overall agreement on the rank ordering of values this was due to the fact that the respondents agreed on most values more than they disagreed on some values.

The specific values that related to change preference were identified by means of discriminant analysis. This technique enabled us to conclude that change preference is more strongly related to instrumental values than terminal values. In fact, using scores on only six instrumental values, it was possible to correctly identify the preference and the degree of preference 62% of the time. The statistical probability of predicting the correct preference by chance is 20%, thus clearly the null hypothesis is rejected. There is a strong relationship between some items in one's value hierarchy and preference for the compressed work week and flexitime. The most important of the values is "independent". There is almost a direct relationship between the rank of this value and the desire for flexitime as opposed to the compressed work week.

The initial statement that the compressed work week is breeding a money-grubbing work force that views work as something to be disposed of as quickly as possible whereas flexitime permits a more relaxed approach to work cannot be verified by this study.

What can be said, at least with respect to the respondents in this study, is that among those who are on a regular work week, there are significant differences between those who prefer flexitime and those who prefer

the compressed work week. The most significant differences lie in the importance assigned to certain values. The most salient values are the instrumental values although notable differences also occur in terminal values. Thus, the choice of flexitime or the compressed work week is seen less as a goal in itself than as a means to achieve one's goals whatever they may be.

This may be an indication that Chris Argyris had a point: there is an incongruity between the needs of individuals and the demands placed on them by organizations. This is not to say that they are opposite but rather that work does not fulfill all the needs of individuals. People have multiple roles, and it is most likely that organizational demands will to a greater or lesser extent infringe upon the employee's other roles. It is significant that the most important value related to change preference is "independent". It seems likely that a desire to do things in an independent manner may be associated with multiple roles but also the heterogeneity of these roles may be related to this sense of independence. McGregor's theories X and Y may in fact be attributed to a lack of recognition of these role conflicts.

Those who preferred the compressed work week scored significantly lower on the importance attached to "independent". This may indicate that people who express a lower need for independence are more prepared to arrange their non-work activities around the job demands. Alternatively those with a higher score on independence are less inclined to yield to the dictates of the worktime requirements or customs. Thus there may be a varying willingness to compromise which may be correlated with independence.

The problem of conflicting time demands would seem to be more amenable to solution by means of flexitime than the compressed work week. This is supported by some unpublished preliminary findings resulting from current experiments in quality of work life being conducted by the Treasury Board of the Government of Canada. They have found that, with the introduction of fully flexible hours, there is a "marked reduction" in various types of "abuse of privileges". The privileges referred to are various types of one and two days leave, sick leave, leave without pay, unauthorized absences as well as late arrivals and early departures. At one of the locations, where the staff are classified as professional, the reduction in abuse of privileges was not a factor, but there was less guilt associated with working non-standard hours.

The indication seems to be that flexible working hours are instrumental in resolving the time demands on employees resulting from their non-work activities and roles. The compressed work week also has this feature but to a lesser extent and at the cost of much longer days. Mr. Harrison of Riddel, Stead and Associates indicates in some unpublished papers that a significant proportion of organizations that try the compressed work week revert to previous arrangements within a year or two whereas this does not appear to be the case with flexitime.

The concept of flexitime is broad enough that whatever advantages may occur with the compressed work week may be incorporated into flexitime by virtue of the banking option. Banking frees employees from a "core-time" restriction and in effect permits employees to have a compressed work week. Extra hours may be "banked" four days a week so that they add up to a whole day which may then be taken off on a day adjoining a weekend.

The compressed work week does not appear to have much to recommend it especially when flexitime can be made to incorporate its one advantage. The preference for one or the other form of altered work week can be explained by the importance attached to independence, thereby denying the null hypothesis that the change preference is not related to value hierarchies.

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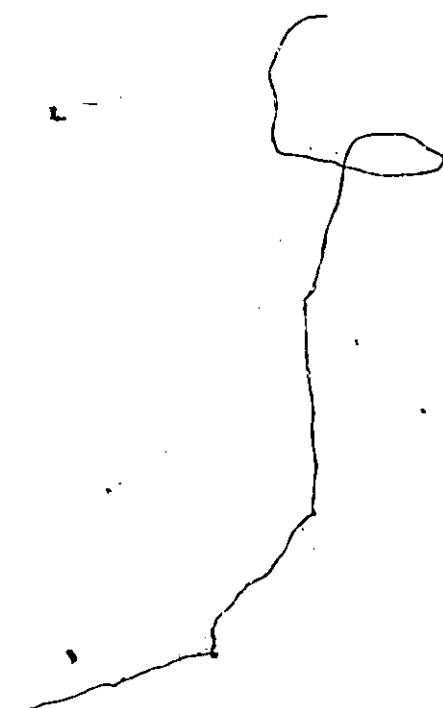
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A P P E N D I X



This is part of a scientific study on changes in the traditional work week.

There are today two fairly popular ways of changing the hours of work. One is called Compressed Work Week and the other is Flexitime. In brief, they can be described as follows:

Flexitime: gives the employee a couple of hours freedom in starting and stopping work each day without changing the total working time.

Basically, what it means is that an individual (or in some cases a group) can work 8 to 4 one day, 9 to 5 another and 10 to 6 on some other day or any similar combinations. It is also possible to work more or less on one day so long as they balance on a weekly or monthly basis. For example, if your regular work day is 8 hours, you may work only 6 hours on a Monday, but make up an extra hour on Tuesday and another extra hour on Thursday and still balance on the required number of hours per week. The only restriction is that the employee must be on the job during specified peak periods of the day.

Compressed Work Week: squeezes the usual number of hours of work per week into 3 or 4 days instead of 5 days.

For example, if the standard work week is a 5 day 40 hour week, under this plan you would still work 40 hours per week but 4 10-hour days instead of 5 8-hour days. The "extra day-off" could be used for making longer weekends or it could be used in the middle of the week.

It should be pointed out that under neither plan is the total number of hours of work changed. The only difference is in how these hours of work are distributed or spread out.

What we are trying to find out is if you would like to see a change and if so which do you prefer Flexitime or Compressed Work Week. If you are already on Flexitime or the Compressed Work Week plan, ignore the first three questions, but it is important that you complete the rest of the questionnaire. The attached questionnaire has been designed to be easy to fill out and your cooperation in completing it will be very much appreciated.

This survey has the approval of both management and employee representatives. The questionnaire is anonymous so that everybody can be frank in their answers. Individual questionnaires are confidential and under no circumstances will they be made available to anyone in your organization.

Please indicate your answers by circling the code that best corresponds to your answers.

EXAMPLE: question 4 on P.3.

How do you spend you spend your time off work? (Check only the ONE that occupies the MOST of your leisure time).

If you spend some time on a photography hobby but spend even more time hunting or fishing you would circle number 2.

1. Hobbies
- ② Outdoors (camping, hunting, fishing)
3. Religious activity, etc.

Please disregard the column of numbers on the extreme right hand side.

Part I If you are now on either Flexitime or the Compressed Work Week, plan skip questions 1, 2 and 3 and start by answering question #4.

1. Would you like to see a change in the way the work week is now set up?

- 1 very much
- 2 yes
- 3 not sure
- 4 no
- 5 not at all

05

2. If there were to be a change, would you prefer Flexitime or Compressed Work Week?

- 1 Flexitime by far
- 2 Flexitime
- 3 No preference
- 4 Compressed Work Week
- 5 Compressed Work Week by far

06

3. With reference to the above question (#2), why do you have this preference?
How would the change or no change benefit you personally?

07 08

4. How do you spend your time off work?

(Check only the ONE that occupies the MOST of your leisure time.)

- 1 Hobbies
- 2 Outdoors (camping, hunting, fishing, etc...)
- 3 Religious activity
- 4 Self improvement (taking courses or special training, studying, etc...)
- 5 Social activity (parties, meeting friends, going out, etc...)
- 6 Travel (not including to and from work)
- 7 Sports (Specify) _____
- 8 Other (Specify) _____

09 10

Part II

INSTRUCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

| | |
|----|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |

A COMFORTABLE LIFE
(a prosperous life)

AN EXCITING LIFE
(a stimulating, active life)

A SENSE OF ACCOMPLISHMENT
(lasting contribution)

A WORLD AT PEACE
(free of war and conflict)

A WORLD OF BEAUTY
(beauty of nature and the arts)

EQUALITY (brotherhood,
equal opportunity for all)

FAMILY SECURITY
(taking care of loved ones)

FREEDOM
(independence, free choice)

HAPPINESS
(contentedness)

INNER HARMONY
(freedom from inner conflict)

MATURE LOVE
(sexual and spiritual intimacy)

NATIONAL SECURITY
(protection from attack)

PLEASURE
(an enjoyable, leisurely life)

SALVATION
(saved, eternal life)

SELF-RESPECT
(self-esteem)

SOCIAL RECOGNITION
(respect, admiration)

TRUE FRIENDSHIP
(close companionship)

WISDOM
(a mature understanding of life)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

Below is another list of 18 values. Arrange them in order of importance, the same as before.

| | |
|----|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |

AMBITIOUS
(hard-working, aspiring)

BROADMINDED
(open-minded)

CAPABLE
(competent, effective)

CHEERFUL
(lighthearted, joyful)

CLEAN
(neat, tidy)

COURAGEOUS
(standing up for your beliefs)

FORGIVING
(willing to pardon others)

HELPFUL (working
for the welfare of others)

HONEST
(sincere, truthful)

IMAGINATIVE
(daring, creative)

INDEPENDENT
(self-reliant, self-sufficient)

INTELLECTUAL
(intelligent, reflective)

LOGICAL
(consistent, rational)

LOVING
(affectionate, tender)

OBEDIENT
(dutiful, respectful)

POLITE
(courteous, well-mannered)

RESPONSIBLE
(dependable, reliable)

SELF-CONTROLLED
(restrained, self-disciplined)

Some jobs are more interesting and satisfying than others. We want to know how people feel about different jobs. Part III contains 18 statements about jobs. Beside each statement circle the number in the column that has best described how you feel about your present job. THERE ARE NO RIGHT OR WRONG ANSWERS. We should like your honest opinion on each one of the statements. For example, if you "agree" with the sample statement numbered (0) then you would circle the number 2 beside that statement.

| | Strongly Agree | Agree | Unde- cided | Dis- Agree | Strongly Disagree | |
|---|-------------------|-------|----------------|---------------|----------------------|----|
| 0. There are some conditions concerning my job that could be improved | 1 | ② | 3 | 4 | 5 | 11 |
| 1. My job is like a hobby to me | 1 | 2 | 3 | 4 | 5 | 12 |
| 2. My job is usually interesting enough to keep me from getting bored | 1 | 2 | 3 | 4 | 5 | 13 |
| 3. It seems that my friends are more interested in their jobs | 1 | 2 | 3 | 4 | 5 | 14 |
| 4. I consider my job rather unpleasant | 1 | 2 | 3 | 4 | 5 | 15 |
| 5. I enjoy my work more than my leisure time | 1 | 2 | 3 | 4 | 5 | 16 |
| 6. I am often bored with my job | 1 | 2 | 3 | 4 | 5 | 17 |
| 7. I feel fairly well satisfied with my job | 1 | 2 | 3 | 4 | 5 | 18 |
| 8. Most of the time I have to force myself to go to work | 1 | 2 | 3 | 4 | 5 | 19 |

| | Strongly Agree | Agree | Unde- cided | Dis- Agree | Strongly Disagree | |
|--|-------------------|-------|----------------|---------------|----------------------|----|
| 9. I am satisfied with my job for the time being | 1 | 2 | 3 | 4 | 5 | 20 |
| 10. I feel that my job is more interesting than others I could get | | | | | | |
| 11. I definitely dislike my work | 1 | 2 | 3 | 4 | 5 | 21 |
| 12. I feel that I am happier in my work than most other people | 1 | 2 | 3 | 4 | 5 | 22 |
| 13. Most days I am enthusiastic about my work | 1 | 2 | 3 | 4 | 5 | 23 |
| 14. Each day of work seems like it will never end | 1 | 2 | 3 | 4 | 5 | 24 |
| 15. I like my job better than the average worker does | 1 | 2 | 3 | 4 | 5 | 25 |
| 16. My job is pretty uninteresting | 1 | 2 | 3 | 4 | 5 | 26 |
| 17. I find real enjoyment in my work | 1 | 2 | 3 | 4 | 5 | 27 |
| 18. I am disappointed that I ever took this job | 1 | 2 | 3 | 4 | 5 | 28 |

Part IV

Fill in or circle the appropriate answer.

1. Age: _____ 30 31
2. Sex: 1 Female 2 Male 32
3. Marital Status: 33
- 1 Single 3 Divorced or Separated
- 2 Married 4 Widowed
4. Education (Circle the highest level that you have reached): 34
- 1 Grade school - not finished
- 2 Grade school - finished
- 3 High school - not finished
- 4 High school - finished
- 5 University - no degree
- 6 University - degree
5. Do you have any certificates or diplomas from a trade school, community college, cegep, or business school 1 Yes 2 No 35
6. Religious Affiliation: 36
- 1 Protestant 4 Other Religion (specify) _____
- 2 Catholic
- 3 Jewish 5 No Religion
7. Type of occupation you now have: 37
- 1 Administrative
- 2 Office - other than administrative or supervisory
- 3 Professional
- 4 Skilled worker
- 5 Supervisor

8. The total income of your family in 1972 was:

- 1 Less than \$5,000.
- 2 Between \$5,000 and \$10,000.
- 3 Between \$10,000 and \$15,000.
- 4 Between \$15,000 and \$20,000.
- 5 Over \$20,000.

38

9. How many years have you been

| | Less Than 2 years | Between 2 & 5 | Between 5 & 10 | Between 10 & 15 | Over 15 | |
|------------------------------|----------------------|------------------|-------------------|--------------------|------------|----|
| a) working | 1 | 2 | 3 | 4 | 5 | 39 |
| b) at the same company | 1 | 2 | 3 | 4 | 5 | 40 |
| c) at the same job | 1 | 2 | 3 | 4 | 5 | 41 |

10. Do you have any children?

1 yes

2 No

42

If "yes",

how many under 6 years of age _____

43

how many between 6 and 15 years of age _____

44

how many over 15 years of age _____

45

Thank you for your co-operation.