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THE RELATIONSHIP BETWEEN JOB SATISFACTION
AND LIFE SATISFACTION: AN EMPIRICAL
TEST OF THREE MODELS ON A
NATIONAL SAMPLE

by

Paul J. Bamundo

A dissertation submitted to the Graduate
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Abstract

THE RELATIONSHIP BETWEEN JOB SATISFACTION AND LIFE SATISFACTION: AN EMPIRICAL TEST OF THREE MODELS ON A NATIONAL SAMPLE

BY

Paul J. Bamundo

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The purpose of this study was to test three models which have been proposed to predict the relationship between job satisfaction and life satisfaction. The predictions made are a positive correlation (Generalized Model), a negative correlation (Compensatory Model), and a zero correlation (Segmentation Model).

Questionnaires were sent to a nation-wide sample of 2,200 potential subjects; 911 usable questionnaires were returned. Overall job satisfaction was measured, as was satisfaction with specific aspects of the job (pay, supervision, co-workers, work itself and promotions). The life domain measures included overall life satisfaction, happiness, marital adjustment, health and alcohol consumption.

The hypotheses tested and pertinent results were as follows.

Hypothesis 1 predicted a positive relationship between job and life satisfaction. This hypothesis received consistent support across the entire sample and within subgroups of the sample. Hypothesis 1a predicted a stronger relationship between job and life satisfaction for men; this was found to be the case. Hypothesis 1b and 1c predicted an increase in

the strength of the relationship with age and education respectively; hypothesis 1b received only partial support, while hypothesis 1c was strongly supported. Hypothesis 1d speculated that married people would exhibit the strongest job and life relationship; this effect was confirmed. Hypothesis 1e speculated an increase in strength of the relationships between job and life satisfaction as a function of increasing income; this was found to be the case. A strong relationship between job and life satisfaction was predicted for self-employed people (hypothesis 1f) and union members (hypothesis 1g); the former hypothesis was supported, the latter was not. Increased tenure was expected to cause an increase in the strength of the relationship between job satisfaction and life satisfaction (hypothesis 1h); a curvilinear relationship was found. Hypothesis 1i predicted an increase in the strength of the relationship with higher job levels; this hypothesis was supported. A comparison of blue and white-collar workers was expected to show a stronger relationship for the white-collar group (Hypothesis 1j); this was not found. Finally, hypothesis 1k predicted that the strength of the relationship between job and life satisfaction would increase as city size decreased; this hypothesis was not supported. The weakest relationships were found at the extremes, that is, very large and very small cities.

Overall, the Generalized Model received the most consistent support. It appears that the work and life spheres are positively related and that satisfactions in one area

effect satisfactions in other areas. This result points up the significance of viewing workers in their total life space, rather than in any one specific facet of life.

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CHAPTER 1

MODELS AND LITERATURE REVIEW

Three models which predict the relationship between job satisfaction and life satisfaction have been developed. Although the underlying mechanisms and directionality of the three models are still areas of some controversy, there is widespread agreement on the sign of the correlation coefficients predicted by each model.

In the following sections each model is identified and the predicted relationships are stated. In addition, the rationale for each model is provided, based on a sampling of the thoughts, speculations and observations of various scholars. Finally, a literature review of past research is undertaken.

It should be pointed out that only a small number of research projects have been carried out specifically to test one or more of these models or the effects of moderator variables on these models (Seashore and Taber 1975). Nevertheless, some research has been done which can be interpreted as relevant to testing these models (e.g., tests using mental health or alienation as life satisfaction criteria). Such studies are included in a chronological literature review presented at the end of this chapter.

Central to all three models is the concept of job

satisfaction, a concept which has been defined in many ways.

Job Satisfaction

Definitions

Quinn and Kahn (1967) reviewed the literature on job satisfaction and concluded that there are almost as many definitions of job satisfaction as there are industrial psychologists and almost as many ways to measure job satisfaction. For example, job satisfaction has been defined as the degree of fit between the individual's needs, expectations and aspirations and his work experience (Cherns and Davis 1975; Faxen and Hansson 1973; Locke 1969).

Yukl and Wexley (1975) define job satisfaction in a similar manner:

The term 'job satisfaction' refers to an employee's general attitude toward his job. To the extent that a person's job fulfills his dominant needs and is consistent with his expectations and values, the job will be satisfying. A number of characteristics of the job may be relevant to a person's need fulfillment and can therefore influence his job satisfaction.

Davis (1977) defines job satisfaction as the favorableness or unfavorableness with which employees view their work. Satisfaction results when there is a fit between job characteristics and the wants of employees. It expresses the amount of congruence between one's expectations and the rewards that the job provides.

In considering the issue of job satisfaction Rietz (1977) defines an "attitude" as a persistent tendency to feel and behave in a particular way toward some object. He feels that two aspects of this definition should be stressed. First,

attitudes persist or endure; that is, in the absence of forces to change, the individual's attitude toward a certain object will remain the same. Second, a person's attitude is directed toward some object, about which he has both feelings and beliefs. Reitz concludes that job satisfaction is a set of attitudes about work.

Locke (1974) defines job satisfaction as a pleasurable state which results from the appraisal of one's job experience as allowing the attainment of one's job values. These job values reflect one's physical and psychological needs. Locke further suggests, that operationalization of job satisfaction results in many definitions.

An examination of this sample of definitions of job satisfaction reveals that even those close in conceptualization have subtle differences. Lawler (1973) indicates that the problem with attempting to define job satisfaction is largely a function of the lack of any consistent theoretical underpinning. Lawler, in comparing motivation and job satisfaction, states:

Unfortunately, no similar set of theories exists in the area of job satisfaction. What little theory there is comes from the research of industrial psychologists. In some cases this theory is not explicit but is implied by the way satisfaction is measured.

Indeed the problem of defining job satisfaction, may be more a function of the number of different theoretical approaches than the lack of them. This situation is magnified further by the lack of consistency in terminology, as will be demonstrated in the following elaboration of theories of job

satisfaction.

Theories of Job Satisfaction

Lawler (1973) identifies four different theories of job satisfaction; these are Fulfillment Theory, Discrepancy Theory, Equity Theory and the Two-Factor Theory. A brief outline of each theory is given below.

Fulfillment Theory. Schaffer (1953) has argued that 'job satisfaction will vary directly with the extent to which those needs of an individual which can be satisfied are actually satisfied.' Vroom (1964) also sees job satisfaction in terms of the degree to which a job provides a person with positively valued outcomes. He equates satisfaction with valence and adds 'If we describe someone as satisfied with an object we mean that the object has positive valence for him. However, satisfaction has a much more restricted usage. In common parlance, we refer to a person's satisfaction only with reference to objects he possesses.' Researchers who have adapted the fulfillment approach measure people's satisfaction by simply asking how much of a given facet or outcome they are receiving. Thus, these researchers view satisfaction as depending on how much of a given outcome or group of outcomes a person receives.

Discrepancy Theory. Recently, many psychologists have argued for a discrepancy approach to thinking about satisfaction. They maintain that satisfaction is determined by the difference between the actual outcomes a person receives and some other outcome level. The theories differ widely in their definitions of this other outcome level. For some theories it is the outcome level the person feels should be received, and for other theories it is the outcome level the person expects to receive. All of the theoretical approaches argue that what is received should be compared with another outcome level and when there is a difference - when received outcome is below the other outcome - dissatisfaction results.

Equity Theory. Equity theory is primarily a motivation theory, but it has some important things to say about the causes of satisfaction/dissatisfaction. Adams (1963, 1965) argues in his version of equity theory that satisfaction is determined by a person's perceived input-outcome balance in the following manner: the perceived equity of a person's rewards is determined by his input-outcome balance; this perceived equity in turn, determines satisfaction. Satisfaction results when perceived equity exists.

Thus satisfaction is determined by the perceived ratio of what a person receives from his job relative to what a person puts into his job. According to equity theory, either under-reward or over-reward can lead to dissatisfaction. The theory emphasizes that over-reward leads to feelings of guilt, while under-reward leads to feelings of unfair treatment.

Two-Factor Theory. ...Two aspects of the theory are unique and account for the attention it has received. First, two-factor theory says that satisfaction and dissatisfaction do not exist on a continuum running from satisfaction through neutral to dissatisfaction. Two independent continua exist, one running from satisfied to neutral, and another running from dissatisfied to neutral. Second, the theory stresses that different job facets influence feelings of satisfaction and dissatisfaction. ...factors such as achievement, recognition, work itself, and responsibility are mentioned in connection with satisfying experiences while working conditions, interpersonal relations, supervision and company policy are usually mentioned in connection with dissatisfying experiences.

A different method of categorizing satisfaction theories was proposed by Locke (1974) and summarized by Brigando (1976). This scheme dichotomized models of job satisfaction as either content theories or process theories. Content theories attempt to specify particular needs to be satisfied or values to be attained as determinants of job satisfaction. Locke lists the two-factor theory (Herzberg) as a major content theory. Process models, on the other hand, theorize that an individual's affective reactions result from the process by which the individual interacts with his environment. He indicates that controversy exists as to which attributes of the person determine these reactions. Attributes which have been examined are expectancies, needs and values. Expectancies refer to the individual's anticipation of environmental offerings. Locke states that theorists have argued that an individual's affective reactions are based upon the discrepancy

between these environmental offerings and those which the individual has adapted to or expects. Needs, according to Locke (1974), may be dichotomized as physical or psychological and that needs are objective requirements of an organism's survival and well-being. Needs exist whether or not the organism consciously desires their fulfillment. While there are a number of theorists who subscribe to need fulfillment models, the concept of need is rarely defined adequately or distinguished from related concepts such as value. Values are those things which a person wants or seeks to attain. Unlike needs, values are part of the consciousness of the individual and are required by him.

Gillo (1973) highlights three approaches that have influenced the definition of job satisfaction. These approaches are: (1) the need-satisfaction approach; (2) the value-attainment approach; and (3) the psychometric, relatively assumption-free approach.

The Need-Fulfillment Definition. The need-satisfaction approach to the study of job satisfaction defines satisfaction as that feeling which results from fulfillment of the individual's needs. The major proponents of this approach have been Argyris (1964), McGregor (1960), Porter (1961), and Porter and Lawler (1968). The approaches are based on Maslow's theory of motivation (1950, 1954, 1970). Maslow assumed that the individual is innately equipped with five types of needs (1) security needs, (2) social needs, (3) esteem needs, (4) autonomy needs, and (5) self-actualization needs. ...According to Maslow (1970) these needs are arranged in a hierarchy, the security being the lowest and the self-actualization need being the highest. It implies that the individual can attain a self-actualization need only after all lower needs are fulfilled. These needs are innate, all are equipped with them, and all strive knowingly or not to advance to the highest level; thus the individual is perceived of as an invariant.

Gillo goes on to point out that operationalization of some of the concepts in the theory is virtually impossible, making an adequate test of the theory difficult.

The Value-Attainment Approaches. Gillo (1973) cites Locke's (1969) interpretation:

Here, the individual is perceived as striving for certain values, of which he is aware. The major difference to the need approaches are the lack of hierarchy assumptions, the possibility of individual differences in terms of how important each of the values is across the individuals, and the possibility of variations over time in the degrees of importance of each of the values for an individual.

This model leads to a definition of job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values."

Job dissatisfaction is defined as "the unpleasant emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values or as entailing disvalues."

The Psychometric Approaches to Job Satisfaction. Gillo (1973) evaluates the notion that job satisfaction is what the instrument measures, it is a definition of job satisfaction by implication only. Gillo feels that in most cases the implied definitions are more similar to Locke's (1969) value-attainment approach than to the need-fulfillment approach.

Gillo reviews an evaluation of twelve measures of job satisfaction done by Robinson (1969). The twelve measures are: (1) the Job Descriptive Index (JDI) published by Smith, Kendall and Hulin (1963, 1965, 1969); (2) the index of job

satisfaction proposed by Kornhauser (1965); (3) the factors of job satisfaction and job dissatisfaction by Dunnette, Campbell and Hakel (1967); (4) the Science Research Associates employee attitude survey (1966); (5) Carlson, et al. (1963) IRC employee attitude scales; (6) Morse's (1953) index of employee satisfaction; (7) Johnson's (1955) job satisfaction scale; (8) Schletzer's (1965) job dimension blank; (9) Brayfield and Rothe's (1951) job satisfaction index; (10) Hoppock's (1935) job satisfaction scales; (11) Kerr's (1948) tear ballot; and, (12) Wood's (1944) employee morale scale. The conclusion reached is that: "Of these scales, the JDI by Smith et al. (1963, 1965, 1969) clearly represents the highest level of psychometric sophistication".

Other scales which have been used with some degree of regularity are the Porter Need Satisfaction Questionnaire (1961) and the Minnesota Survey of Opinions Scale (Rundquist and Sletto, 1936).

Gillo (1973) states:

In summary, the psychometric approaches have dealt with the definition of job satisfaction by implication, or, in the case of the JDI, apparently retrospect. In addition, these approaches have identified job satisfaction as a multidimensional concept with at least two and very likely five dimensions.

Research on Job Satisfaction

The development of interest in job satisfaction has followed two different paths; the major emphasis has been on an examination of the relationship between job satisfaction and indicies of efficiency (e.g., production, turnover, absen-

teeism, etc.). The second, more recent approach (Quality of Work) has attempted to link job satisfaction with other psychological, physiological and sociological phenomena.

Lawler (1973) states that most of the research on the subject of job satisfaction has been done by psychologists interested in work organizations. In 1935, Hoppock published his famous monograph on job satisfaction and in 1939 the results of the well-known Western Electric studies were completed. The Western Electric studies emphasized the importance of studying the attitudes, feelings and perceptions employees have about their jobs. These studies also suggested that employees have strong affective reactions to what happens to them at work and that these affective reactions cause certain kinds of behavior such as strikes, absenteeism, and turnover. Although the studies failed to show any clear-cut relationship between satisfaction and job performance, they succeeded in generating a tremendous amount of research on job satisfaction (Lawler 1973).

Lawler (1973) maintains that during the last thirty years thousands of studies have been done on job satisfaction. Originally, much of the interest was stimulated by a desire to show that job satisfaction is important because it influences productivity. Underlying the earlier articles was a strong conviction that "happy workers are productive workers." Recently, however, this theme has disappeared and research is concerned more with finding the causes of job satisfaction. This approach to studying job satisfaction is congruent

with the increased prominence of humanistic psychology, which emphasizes human affective experience.

Lawler (1973) continues by saying:

The recent interest in job satisfaction also ties in directly with the rising concern in many countries about the quality of life. There is an increasing acceptance of the view that material possessions and economic growth do not necessarily produce a high quality of life. Recognition is now being given to the importance of the kinds of affective reactions that people experience and to the fact that these are not always tied to economic or material accomplishments. Through the Department of Labor and the Department of Health, Education and Welfare, the United States government has recently become active in trying to improve the affective quality of working life. Job satisfaction is one measure of the quality of life in organizations and is worth understanding and increasing even if it doesn't relate to performance. This reason for studying satisfaction is likely to be an increasingly prominent one as we begin to worry more about the effects working in an organization has on people and as our humanitarian concern for the kind of psychological experiences people have during their lives increases.

Unfortunately, little research has been done on defining and testing the concept of "life satisfaction". The elements used to measure the life domain will be outlined in a subsequent section of this paper.

The Generalized Satisfaction Model

The Generalized Satisfaction Model predicts a positive relationship between job satisfaction and life satisfaction. Several scholars believe that work is the central aspect of workers lives and its effects are generalized to other phases of their lives.

Levenstein (1968) states that in practice the quid pro quo for regimentation at work is not likely to be a leisure enjoyed in freedom. More probably, the alienation created on

the job will be carried over into one's leisure behavior (a generalized effect).

Gardell (1972) speculates that the potential of work to satisfy ego-related needs bears not only upon work satisfaction but also upon general life adjustment or mental health. Working conditions that offer limited opportunities for influencing decisions, perceived meaningfulness and self-realization tend not only to reduce work satisfaction, but also to instill feelings of inferior ability and lower prestige in the larger society and to diminish life satisfaction and well-being.

Faunce and Dubin (1972) describe a general adjustment mechanism for a spill-over (Generalized) model.

Assume a model in which the individual adjusts in approximately the same way in all his social environments. If from this standpoint, the work organization is considered as a central environment in an industrial society, then this model will predict that the individual has a spill-over form of adjustment, from work to non-work settings. Thus, if the work environment maximizes his opportunities for personality expression, he will operate in the same way in non-work environments and there will be a spill-over of his work adjustment into other institutional areas of behavior. Essentially, the spill-over model views the individual as having certain constants in his personality structure such that whatever his adjustment is in a central institutional setting it will be comparable in all other institutional settings.

Faunce and Dubin leave open the possibility that the central institutional setting need not be work; yet, the relationship would still be a positive one.

The Compensatory Satisfaction Model

The Compensatory Satisfaction Model predicts a negative relationship between job satisfaction and life satisfac-

tion. The main assumption of this model is that people can compensate in one setting for a lack of satisfaction in another setting.

Ginsberg (1972), in discussing a compensatory model, states that if workers find their jobs oppressive or uninteresting they are required to spend fewer hours on the job, permitting them to seek alternative satisfaction elsewhere.

Faunce and Dubin (1972) present a Compensatory Model as an alternative to the spill-over (Generalized) model.

An alternative to the spill-over model is the compensatory model, in which the individual's adjustment in a central institutional setting, like work, is so salient that it compensates for poor adjustments in other institutional areas. Individuals who find work challenging, satisfying, and rewarding may show a considerably lower investment of self in other settings, simply because the high level of reward achieved at work is sufficient to compensate for less rewarding behavior outside of work. On the other hand, for the individual who finds work unrewarding, there may be very significant compensatory adjustments with a high level of self-investment in non-work institutional settings.

Further they state that the Compensatory Model of adjustment suggests that the individual may have a single or at most a few areas in which he invests a great deal of himself and from which he draws high levels of satisfaction, and many areas of life experience where his level of self-investment is much lower and his returns are of lesser consequence.

The Segmentation Satisfaction Model

The Segmentation Satisfaction Model posits no relationship between job satisfaction and life satisfaction. The model suggests that people can deal with different aspects of their lives as relatively independent entities.

This model is the least developed of the three. It assumes the ability on the part of individuals to compartmentalize their lives so as to minimize the interaction of one segment on the others. Quinn et al. (1974) point out that according to this model work is separated from leisure, production from consumption, workplace from home; and that the attitudes that develop in one setting have no effect on attitudes in other settings.

There is disagreement as to which of these models is valid. However, the real issue may be under what circumstances do each of these models receive support (Faunce and Dubin 1972; Quinn et al. 1974).

Faunce and Dubin (1972) speculate a priori, that younger workers will be more instrumentally oriented, with a lower self-investment in work; and therefore a Compensatory Model would apply to them. Hulin and Blood (1968), after reviewing the literature on job satisfaction, use the same reasoning with reference to people with urban backgrounds and also come to the conclusion that a Compensatory Model should prevail. The basis for their logic is that urban workers have a weaker belief in the work ethic and are more likely to see work as being instrumental in nature.

Hulin and Blood (1968) and McDonough (1972) conjecture that "blue-collar" workers will be more instrumentally oriented than white-collar workers and therefore more inclined to demonstrate a compensatory effect.

The studies presented in this section can be categorized as direct tests of one or more of the models and moderators (e.g., Gillo 1973; Kavanagh and Halpern 1977); indirect tests of one or more of the models and moderators (e.g., Kornhauser 1965 mental health); or tests of key variables associated with the models and possible moderators (e.g., Quinn et al. 1974).

The studies are presented in chronological order, irrespective of category. This procedure is followed to give a sense of the development of research in this area.

Brayfield and Wells (1957) tested the effect of sex on the relationship between job satisfaction and life satisfaction. They measured overall job satisfaction (Brayfield-Rothe Job Satisfaction Index 1951), specific facets of job satisfaction (Science Research Associates Employee Inventory 1952), general life satisfaction (Rundquist-Sletto Morale Scale 1936), and summation responses to specific life situation items (Wietz Test of General Satisfaction). The subjects for the study were forty-one male and fifty-two female civil service employees in general office occupations. The results of a correlational analysis indicated a strong positive relationship between job and life items for men but no significant relationship for women. In effect, sex appeared to be a moderator of the strength of the relationship between job and life satisfactions. Both groups, however, tended to conform to the Generalized Model. Although this study can be criticized on the basis of both the size and representative-

ness of the sample used, the study was one of the first to test the job and life satisfaction relationship and a moderator of it.

Dumazedier and Latouche (1962) questioned employees of thirty firms in the area of Annecy, France. Each firm had fifty or more employees with the largest firm having over 2,000 employees. The results of these interviews indicate that workers who expressed satisfaction with work attached less importance to certain semileisure activities centered in the home. This result is indicative of a compensatory effect. One must, however, recognize that the level of rigor of this study was extremely low. In addition, cultural and industrial level factors may have had some bearing on the results.

Kornhauser (1965) was one of the first writers in the field to emphasize people as significant ends in and of themselves. A much cited study was conducted on 408 hourly paid factory workers in the automotive industry in the Detroit area. Overall ratings of job, family - home, and leisure and community satisfactions were obtained through an interviewing procedure. An index of mental health was also developed. Job satisfaction was positively related to family - home satisfaction ($r = .34$), leisure satisfaction ($r = .26$) and community satisfaction ($r = .32$).

A summary of Kornhauser's findings indicate the following:

1. Work appears to be a very important aspect of one's

life

2. Job satisfaction is not the same as mental health, but they are correlated

3. Life satisfaction and self-esteem are closely associated with mental health

4. Lower levels of nervousness and anxiety are associated with higher mental health

5. Mental health is directly related to occupational level, i.e., the higher the occupational level the better the mental health

6. When people are in a "financial pinch" mental health suffers

7. Education does not appear to be related to mental health

8. Situational factors are more important than personality factors in determining mental health

These findings led Kornhauser to conclude that a spill-over hypothesis (Generalized Model) was supported. Indeed, Kornhauser implies directionality from the workplace to the external sphere.

This study is subject to criticism on the following grounds:

1. The sample selected did not represent the working population and, therefore, the findings are limited in terms of the generalizations that may be made

2. The data were collected in 1953 and 1954; ten years before the material was published. Therefore, it is

quite possible that the results of the study are time bound

3. The method used to collect the data was an interviewing technique and is, therefore, subject to various biases (e.g., social desirability, acquiescence, etc.).

Friedlander (1966) examined the importance of work related and nonwork related factors to satisfaction for low, middle and high status groups and between white and blue-collar groups. Anonymous questionnaires were sent to the homes of 3,200 United States Government employees in a small community of 12,000 people; the number of usable responses was 1,462. Results indicate the work context factors are more important to blue-collar workers, while work content factor's are more important to all but low status white-collar workers. Overall, work factors appear to be more important to general satisfaction than do nonwork factors. This finding supports a generalized effect and implies directionality from work to life.

Bradburn (1969) collected interview data in four waves in the suburbs and inner-city of Detroit, Chicago, a Washington suburban county and ten other metropolitan areas. The sample sizes for Waves I through IV were 2,787 subjects, 480 subjects, 2,163 subjects and 448 subjects, respectively. Measures taken include positive and negative affect (Bradburn and Caplovitz 1965), happiness, social participation, anxiety, health, income, occupation, education and other demographic items. The findings of this study are:

1. People with considerably low incomes with heavy

family responsibilities experience a low sense of well-being

2. Poor mental health is associated with negative affect measures

3. High and stable negative affect has a long-range effect on mental health

4. High negative affect results in poor health perception - with a very pronounced effect at very low income levels.

5. Social participation is positively correlated with positive affect measures

6. Being unmarried decreases one's sense of well-being - especially for people who were married at one time

7. The finding described for marital status is even more pronounced for men

8. For all status levels, work satisfaction and feelings of inadequacies in one's work role is constantly related with negative affect

Bradburn concludes that work is still the major element in the life of contemporary American men and is becoming more so for American women. These findings are viewed as supportive of the Generalized Model with possible moderating effects of income, marital status and sex. It should be pointed out, however, that the data were collected several years prior to the publication date and that parts of an earlier study were utilized in the study in question.

Messiner's (1971) study of 206 industrial workers in a Vancouver Island community supported the spillover (Gener-

alized) model. This finding is in agreement with findings of Kornhauser (1965). Messiner maintained that attention should be directed away from overall job satisfaction and directed instead toward particular sources of dissatisfaction or deprivation at work, examining each "nonwork" activity in terms of how relevant it is to each source of dissatisfaction. Quinn et al. (1974) pointed out that Messiner's study is particularly instructive in suggesting that:

...rather than seeking only to determine whether the spillover or compensatory argument is correct, emphasis should be placed instead on the more interesting question of under what circumstances, with regard to what specific attitudes and behaviors, and in what segments of the labor force spillover, compensation and segmentation are most common.

This study is one of the most recent studies designed to test the spillover (Generalized) satisfaction model and in this regard it is somewhat unique. Nevertheless, the study was done on a relatively small and geographically specific population; and is, therefore, limited in terms of its ability to generalize results.

Bartolomé (1972) studies forty executives to determine the relationship between behavior or "style" of leadership at the office and at home. The findings indicated that "style" at the office and "style" at home are positively related. Bartolomé argues that it is of limited value to study people in their work role only; rather the emphasis should be on the "whole" man. Although the size and composition of the sample in this study leave much to be desired, the study itself lends support to a spillover (Generalized) view of mana-

ger's lives.

Sheppard and Herrick (1972) used an interviewing technique on a population of 371 blue-collar union workers (270 from one area in Pennsylvania and 101 from Kalamazoo, Michigan). The data collected include measures of alienation, authoritarianism, quality of work, variety, task levels and various demographic items. The findings from this study are indicated below:

1. Alienation may be situational, that is, more a function of the task level. The higher the task level, the lower the alienation. This relationship appears to be mediated by the authoritarianism of the person

2. Alienation appears to be negatively related to income levels

3. Young workers are less authoritarian and, therefore, may be more alienated than older, more authoritarian workers (in effect, there is a greater gap between expectation and reality for younger workers)

4. Younger workers have a higher level of job dissatisfaction than older workers

5. Younger workers are more concerned with quality than are older workers

6. Younger workers are more likely to accept job-rotation than are older workers

7. Younger workers have less positive feelings about unions than do older workers

8. Women are more dissatisfied than men

9. Single people are more dissatisfied than married people

10. Authoritarianism not age is more important - i.e. young authoritarian types are the same as old authoritarian types

11. More additional earners in the household seem to increase the "blues" of the major earner

This study is subject to the same criticisms that were leveled at the Kornhauser (1965) study, that is, a relatively small and limited sample and the use of an interviewing technique. It does, however, indicate potential moderators of job and life relationships.

Iris and Barrett (1972) tested the relationship between ratings of satisfaction with family and leisure and the importance and satisfaction attributed to five job facets - promotion, co-workers, supervision, pay and the work itself (Job Descriptive Index - Smith, Kendall and Hulin 1969). The sample consisted of two groups of foremen. One group was characterized a priori as being relatively satisfied with their jobs (N = 35); and the other characterized a priori as being relatively dissatisfied with their jobs (N = 34). These assessments were later confirmed on all scales of the Job Descriptive Index (JDI). The analysis did not uncover any significant correlations, but the signs of the coefficients were always opposite for each group. For the satisfied group greater satisfaction with family and leisure was associated with greater importance being attributed to the five facets

of work (a generalized effect). The dissatisfied group, on the other hand, demonstrated negative relationship indicating that for this group a Compensatory Model of work-nonwork relationships is most appropriate. The dissatisfied group was, on average, four years younger, had four years less tenure and made \$130 less per month. These factors may act to moderate the work-nonwork linkage. Once again the small sample used creates some doubts as to the generalizability of these results. Nevertheless, these findings add to the store of knowledge on the subject.

Mansfield (1972) used a sample of fifty-two managers to test the relationship between work and nonwork desire satisfaction and desire valence within five classes of desires (security, social, esteem, autonomy, and self-actualization). The instrument used was a nine item modified version of the Porter Need Satisfaction Questionnaire (1961). The results of the analysis do not indicate support for any of the three competing models. This may be a function of the small and specialized sample that was used.

Gillo (1973) tested the relationship between job and leisure satisfactions. The subjects were 213 employees of a nationwide utility company. The measures used included fifteen leisure behavior categories, seven classes of nonwork organizations, twenty-three items from the JOB SAT '70 questionnaire (Quinn et al. 1970), overall job satisfaction, overall life satisfaction and leisure satisfaction and various demographics. The author concludes that leisure satisfaction

levels are important for predicting the expectations of satisfactions sought in a job by importance variables. Gillo emphasizes the significance of external environmental factors in determining job satisfaction. Age, sex, tenure, income, skill level and job structure may moderate the result. To summarize, the findings of this study indicate a generalized effect with the external (life) domains effecting the internal (work) domain.

Lifter (1973) analyzed questionnaires completed by 548 employees of a Detroit area short-term non-profit general hospital. Job content characteristics were measured and included variety, autonomy, task identity, feedback, influence, friendship opportunities and dealings with others. Major attitude measures included organizational satisfaction, life satisfaction, job satisfaction, job involvement and intrinsic motivation. Variation in life satisfaction was related only to the influence dimension. In addition, at low job levels life satisfaction was significantly correlated with age, pay rate and pay satisfaction. It appears, therefore, that task level may moderate the relationship being tested. Once again, the projectability of these results is limited as a function of the sample selected.

Winter (1973) tested three relationships between job satisfaction and leisure satisfaction. He did not hypothesize directionality because of a lack of prior research in this area. The subjects were 438 adult full-time employees in business and industry in the western area of New York State.

These subjects represented six institutions and five general job categories. Among the scales used were the Minnesota Job Satisfaction Questionnaire (1936) and the Hoppock Job Satisfaction Scales (1935). The findings indicate a positive relationship between particular job items and particular leisure items; a positive relationship between the source of greatest satisfaction on the job and the source of greatest satisfaction at leisure, and a positive relationship between overall job satisfaction and overall leisure satisfaction. These results can be interpreted as supporting the Generalized Model.

Quinn et al. (1974) analyzed data collected on a national sample to determine differences in levels of job satisfaction in general and as a function of specific factors. A comprehensive interviewing program was undertaken to measure overall job satisfaction, facet-specific job satisfactions and other work and demographic factors. When job satisfaction by occupation was examined the only statistically significant difference was for the lowest status jobs (i.e., non-farm laborers). There was no difference between the satisfaction level of men (N = 1014) and women (N = 479). Education appears to have an effect on the amount of challenge one desires on a job, with more educated people desiring more challenging jobs. Age appears to effect the level of job satisfaction with people under thirty being least satisfied while people over fifty are most satisfied. White-collar workers are significantly more satisfied with their jobs than

blue-collar workers and viewed challenge as the most important job facet. A statistically significant difference in job satisfaction is also found between people whose incomes were \$3,999 or less and people whose incomes were \$10,000 or higher. Finally, people who are self-employed are more satisfied than people who are wage and salaried. Although these studies were not designed to test any of the models, directly or indirectly, they do provide insight into moderator effects on one of the most important elements of all three models, namely job satisfaction.

McDonald and Gunderson (1974) conducted a study on 5,851 navy enlisted men to determine the relationship between job satisfaction and military status, job related variables, health related variables and various demographic factors. Among the measures used was a health opinion survey scale and a three item job satisfaction scale. The results of an analysis of responses to the questionnaires indicate that health related variables were most highly correlated with job satisfaction. This finding is consistent regardless of the actual health level of the subject. Apparently those who were satisfied with their jobs also perceived themselves as being in good health (a generalized effect). It is obvious that the sample used is not representative of the American worker, nor were the scales used the most desirable.

Gecham and Weiner (1975) undertook a study to test the relationships between job involvement, job satisfaction and mental health. Fifty-five female elementary school teach-

ers kept a week long daily record and made a self report of their time allocations. In addition, a paper and pencil adaptation of Kornhauser's (1965) mental health scale was constructed. The seven item satisfaction scale was also adopted from a scale used by Kornhauser (1965). Finally, the twenty item Lodahl and Kejner (1965) job involvement scales is utilized. It was found that personal time devoted to work was positively correlated to job involvement, but was unrelated to job satisfaction. While mental health is positively related to job satisfaction it is not correlated significantly with job involvement. In addition, it was found that age is correlated positively with both mental health and job satisfaction. These results parallel those of Kornhauser (1965) and further support the Generalized Model. It is interesting to note that even when people claim they are not involved in their jobs the effect of low levels of job satisfaction may still be low levels of mental health. Once again, the sample used may limit the overall projectability of these findings, and the time period covered (one week) may not reflect accurately time spent on duties. Nevertheless, the study replicates an earlier work (Kornhauser 1965) and uncovered consistent results.

Schesta (1975) examined the possibility that leisure is used to compensate for job dissatisfaction. The questionnaire included measures of both intrinsic and extrinsic job satisfactions, work as a central life interest, attitudes toward leisure, age, sex and occupation. The subjects were

561 Veterans Administration hospital personnel. Both correlational analysis and multiple-regression analysis were undertaken. The author concluded that the results lent partial support to the compensatory hypothesis. The findings were:

1. There was a negative correlation between both intrinsic and extrinsic job satisfactions and the affinity for leisure

2. There was a negative correlation between both intrinsic and extrinsic job satisfactions and self-definition through leisure

3. There was a positive correlation between both intrinsic and extrinsic job satisfactions and the amount of work desired

4. There was a negative correlation between work as a central life interest and the affinity for leisure

5. There was a positive correlation between work as a central life interest and the amount of work desired

6. There was a negative correlation between work as a central life interest and self-definition through leisure

7. There was a negative correlation between age and affinity for leisure

8. There was a negative correlation between age and self-determination through leisure

9. There was no significant differences for any measures on the basis of sex or occupational level

While these findings tended to lend support to the Compensatory Model they also appeared to show that as people

get older they commit themselves more to their jobs and seek less identity through leisure regardless of job satisfaction levels.

Dowell (1975) attempted to test the relationship between work and nonwork satisfactions with life satisfaction. The data collected included a Porter (1961) Need Satisfaction Questionnaire format, Maslow type scales for security, social affiliation, social service, esteem - recognition, authority - responsibility, variety, ability and utilization. The subjects were 286 employees of two catalogue order plants. Three levels of employment were examined - managers, supervisors and non-supervisory personnel. The results indicate that for managers work satisfaction contributes more to life satisfaction than nonwork satisfaction, while nonwork satisfaction contributes more to life satisfaction than work satisfaction for supervisors and non-supervisory personnel. These results indicate that occupational level may moderate the relationship between job satisfaction and life satisfaction. Indeed, the Generalized Model may apply to managers while the Compensatory Model may apply to other levels.

Kavanagh and Halpern (1977) tested the effect of sex and occupational level on the relationship between job satisfaction and life satisfaction. This study was an attempt to replicate the earlier work of Brayfield and Wells (1957). Indeed the measures used were the same: Brayfield - Rothe Job Satisfaction Index (1951), the S.R.A. Employee Inventory (1952), the Rundquist - Sletto Morale Scale (1936) and the Weitz Test

of General Satisfaction (1952). The subjects of the study were 411 university employees. Results of the study show that there is a strong positive correlation between job satisfaction and life satisfaction for both men ($r = .27$) and women ($r = .34$). This finding is at odds with the findings of Brayfield and Wells (1957) who found that there was no significant relationship between job and life satisfaction for women. The authors posit an explanation that the role of women in this society has changed dramatically in the last twenty years and because of their work rôles more closely approximating the traditional male role the positive link exists. Indeed, it may well be that the stronger link for women ($r = .34$ versus $r = .27$) may be indicative of a conscious effort on the part of women to be successful at work and to make work a major aspect of their lives.

The second hypothesis tested was that the relationship between job satisfaction and life satisfaction would increase as the level of job become higher. There was no support for this hypothesis; in fact, as one goes up the scale in the organization the strength of the relationship decreased for both male and female subjects. Nevertheless, the pattern of correlations across all possible moderators was positive thus lending support for the Generalized Model.

Summary of the Empirical Literature

Table 1 includes the seventeen studies that were either specifically designed to test the models or can be interpreted as testing a model. Eleven of the studies tend to sup-

port the Generalized Model, while two support the Compensatory Model. Two other studies show definite moderator effects between job satisfaction and life satisfaction. Finally, two of the studies had no consistent results and might, therefore, be interpreted as supporting the Segmentation Model. It should be noted that none of the studies was specifically designed to test a Segmentation Model. The three competing hypotheses are displayed in Table 2.

Hypotheses to be Tested

On the basis of the evidence, it is concluded that the Generalized Model will be supported and that:

Hypothesis 1. There will be a positive correlation between job satisfaction and life satisfaction. (Table 11 displays the predictions for each of the models on all variables measured. List 1 provides a key to the headings of all Correlational Tables used in this paper.)

The present study includes those moderators most commonly utilized in all categories of studies: age, sex, education, job level (status), income, marital status, tenure, collar-color. The hypotheses generated in conjunction with the findings to date are:

Hypothesis 1a. The strength of the relationship between job satisfaction and life satisfaction will be greater for men.

Hypothesis 1b. The strength of the relationship between job satisfaction and life satisfaction will increase with age.

TABLE 1
SUMMARY OF THE LITERATURE REVIEW

Author(s) & Year	Sample	Measures	Results & Model Sup- ported	Moderator	Effect
Brayfield & Wells, 1957	93 Civil ser- vice employ- ees	Job & Life Satisfac- tion	Generalized Model	Sex	Yes
Dumazedier & Latouche, 1962	Not report- ed	Unstructur- ed Intervi- ews	Compensa- tory Model	NA	NA
Kornhauser, 1965	408 hourly workers	Job & Life Satisfacion Mental Health	Generalized Model	Occupational Level Low Income Education	Yes Yes No
Friedlander, 1966	1,462 Govern- ment employ- ees	Work & Non- work Satis- faction	Generalized Effect	Status Group Collar-Color	Yes Yes
Bradburn, 1969	5,878 All Levels	Positive & Negative Affect Happiness Anxiety, etc.	Generalized Effect	Income Marital Sta- tus Status Level	Yes Yes No
Messiner, 1971	206 Indus- trial Work- ers	Job & Life Satisfac- tion	Generalized Effect	NA	NA

TABLE 1 - Continued

Author(s) & Year	Sample	Measures	Results & Model Sup- ported	Moderator	Effect
Bartolome', 1972	40 Execu- tives	Leadership Styles (office - home)	Generalized Effect	NA	NA
Sheppard & Herrick, 1972	371 Blue- collar Union Workers	Alienation Authoritar- ianism Job Satis- faction	NA	Task Level Income Age Sex Marital Status	Yes Yes Yes Yes Yes
Iris & Barrett, 1972	69 foremen	Family, Lei- sure & Job Satisfac- tion	Dissatisfied Group - Com- pensatory Model Satisfied Group - Gen- eralized Model	Age Tenure Income	Yes Yes Yes
Mansfield, 1972	52 Managers	Work & Non- Work Desire Satisfaction & Desire Valence	No Consistent Findings	NA	NA

TABLE 1 - Continued

Author(s) & Year	Sample	Measures	Results & Model Sup- ported	Moderator	Effect
Gillo, 1973	213 Utility Company Em- ployees	Leisure & Job Satis- faction (overall & facet spe- cific	Generalized Effect	Sex Age Tenure Income Skill Level Job Struc- ture	Yes Yes Yes Yes Yes Yes
33 Lifter, 1973	548 Hospital Employees	Job, Life & Organiza- tion Satis- faction Job Content & Involve- ment	No Consistent Findings	Job Level/ Age	Yes
Winters, 1973	438 Full- time Employ- ees	Job & Lei- sure Satis- faction	Generalized Effect	NA	NA
Quinn et al., 1974	1,493 All Levels	Job Satis- faction (overall- facet specific)	NA	Sex Education Job Level Age Collar-Color Income Self-Employ- ment	No Yes Yes Yes Yes Yes Yes

TABLE 1 - Continued

Author(s) & Year	Sample	Measures	Results & Model Sup- ported	Moderator	Effect
McDonald & Gunderson, 1974	585 Navy Enlisted Men	Job Satis- faction Military Status Health	Generalized Effect	NA	NA
Gecham & & Winer, 1975	55 Female School Teachers	Job Invol- vement, Men- tal Health Job Satis- faction	Generalized Effect	Age	Yes
Schesta, 1975	561 Hospi- tal Staff	Job & Lei- sure Satis- faction Central Life Interest	Compensatory Model	Age Sex Occupational Level	Yes No No
Dowell, 1975	286 - 3 Levels of	Work & Non- Work Satis- faction & Life Satis- faction	Managers - Generalized Model Others - Compensatory Model	Occupational Level	Yes
Kavanagh & Halpern, 1977	411 Univer- sity Employ- ees	Job & Life Satisfac- tion	Generalized Model	Sex Job Level	No Yes

TABLE 2

PREDICTIONS OF THE MODELS OF JOB
SATISFACTION AND LIFE SATISFACTION

Models	Predictions
Generalized	Positive Correlation (+)
Compensatory	Negative Correlation (-)
Segmentation	No Correla- tion (0)

Hypothesis 1c. The strength of the relationship between job satisfaction and life satisfaction will increase as educational level increases

Hypothesis 1d. The strength of the relationship between job satisfaction and life satisfaction will be greatest for married people

Hypothesis 1e. The strength of the relationship between job satisfaction and life satisfaction will increase as family income increases

Hypothesis 1f. The strength of the relationship between job satisfaction and life satisfaction will be greater for self-employed people

Hypothesis 1g. The strength of the relationship between job satisfaction and life satisfaction will be greater for union members

Hypothesis 1h. The strength of the relationship be-

tween job satisfaction and life satisfaction will increase as tenure increases

Hypothesis 1i. The strength of the relationship between job satisfaction and life satisfaction will be greater for high level jobs

Hypothesis 1j. The strength of the relationship between job satisfaction and life satisfaction will be greater for white collar workers than for blue-collar workers

Hypothesis 1k. The strength of the relationship between job satisfaction and life satisfaction will increase as city size decreases

CHAPTER 2

METHOD

Sample and Procedure

The size of the sample contacted was 2,200 people. This sample is representative of the nation's population in terms of territory (see table 3), city size (see table 4), income (see table 5), etc.

TABLE 3
GEOGRAPHIC DISTRIBUTION

Territory	Sample (Percent)	U.S. Population (Percent)
New England	6	6
Middle Atlantic	18	19
South Atlantic	15	14
East South Central	6	6
West South Central	10	9
East North Central	20	20
West North Central	8	9
Mountain	4	4
Pacific	13	13

TABLE 4
CITY SIZE DISTRIBUTION

City Size	Sample (Percent)	U.S. Population (Percent)
2 million and over	24	25
1 to under 2 million	14	14
500,000 to under 1 million	10	11
250,000 to under 500,000	10	10
50,000 to under 250,000	8	8
Not Standard Metropo- litan Statistical Area (under 50,000)	34	32

TABLE 5
INCOME DISTRIBUTION

Family Income	Sample (Percent)	U.S. Population (Percent)
Under \$5,000	14	16
\$5,000 - \$7,999	17	17
\$8,000 - \$9,999	13	12
\$10,000 - \$14,999	30	28
\$15,000 - \$24,999	20	21
\$25,000 and over	6	6

This sample has the advantage of representing the population on many demographic factors. It, therefore, avoids the sampling problems of previous research (Kornhauser 1965; Meissner 1971; Bartolomé 1972). These deficiencies include: small sample sizes, lack of representativeness in type of worker surveyed (the present study used the comprehensive classification developed in the 1972-73 Quality of Employment Survey), income levels and geographic location. The sample used in the present study was selected for use in national market research studies and, therefore, allows greater projectability of results.

The breakdown of demographic factors in this study was more detailed than in much of the prior research and may allow for finer discrimination of moderator effects. For example, the 1970 Survey Research Center study combined all incomes above \$10,000 into one category, while the present study collected several levels of income between \$10,000 and \$25,000.

The questionnaire was mailed directly to the homes of the subjects with a stamped return address envelope enclosed. A cover letter indicated the purpose of the study and instructions for determining who in the household was to fill out the questionnaire. The respondent was assured that his/her identification code would be removed from the questionnaire before coding and analysis were begun. The completed questionnaires were filed in a central location and were kept in the strictest confidence. These procedures generally re-

sult in people giving valid responses (Lawler 1973). Lastly, a follow-up postcard was sent to encourage returns from non-respondents to the first mailing (see Appendices A, B and C).

This procedure has several advantages over the interviewing technique used in much of the prior research (Kornhauser 1965; Sheppard and Herrick 1972). Namely, it does not have the deficiencies inherent in an interviewer/interviewee interaction. The respondents were able to supply information in the comfort and privacy of their homes. This last item is significant when one considers possible biasing effect of responding on the job site.

Questionnaire Development

A preliminary version of the instrument was administered to a group of thirty people who were employed at various jobs. Upon initial completion of the questionnaire, personal interviews were conducted with each of the participants to determine possible deficiencies or problem areas. Based upon these interviews certain items which appeared deficient were dropped or changed so as to overcome the expressed deficiency. Approximately one month later the instrument was again administered to the same subjects and they were once again interviewed. Based on the interviews a degree of "face-validity" was inferred. Finally, the questionnaire was mailed to a random sample of 100 people to determine if any problems might develop in using the mail questionnaire system. No difficulties were encountered.

Scales

The Job Domain was measured using overall job satisfaction and satisfaction with specific aspects of the job, such as, the work itself, pay, supervision, co-workers, promotions. The Life Domain measures included overall life satisfaction, happiness, marital adjustment, health, and alcohol consumption.

Seashore and Taber (1975) outline the two approaches which may be used to measure job satisfaction. Facet-free primary data are obtained when the respondent is asked to indicate his global satisfaction with his job and job environment without specifying in advance the facets to be considered and how they are to be combined. Facet-specific primary data are obtained when the respondent is asked to represent his satisfaction with respect to some specific facet of his job or job environment. There appears to be evidence that the individual facet-specific satisfaction scores reflect their emphasis (more important facets being more highly scored) and do not need to be further weighted (Mobley and Locke 1970; Seashore and Taber 1975).

The present study uses both a global overall measure of job satisfaction and facet-specific measures of job satisfaction. The global measure is:

All in all, how satisfied would you say you are with your job? Would you say you are very satisfied (), somewhat satisfied (), not too satisfied (), or not at all satisfied().

The facet-measure selected is the Job Descriptive Index (JDI) developed by Smith, Kendall and Hulin (1963, 1965,

(1969). The selected device has been compared with many other facet-specific measures and the results have usually been favorable (Robinson 1969; Gillo 1973; Seashore and Taber 1975).

Since the JDI is a major measurement device of this study, a more detailed description of it will be undertaken. The JDI consists of five sub-scales: pay (nine items), supervision (eighteen items), co-workers (eighteen items), promotion (nine items) and work (eighteen items). Each scale in its entirety is listed in Tables 6, 7, 8, 9 and 10 respectively.

Rather than asking the respondent to directly evaluate his job, the respondent is asked to indicate which adjectives describe his job. This is done by checking the "Yes", "No", or "?" column. The "?" column is used if the respondent cannot decide if the adjective applies.

Smith et al. (1969), state that job satisfaction represents the difference between what is expected and what is experienced in relation to the alternatives available in a given situation (a discrepancy theory of job satisfaction). The JDI measures the affective responses to these experiences by measuring the feelings associated with different areas of job satisfaction (Smith et al. 1969).

The scales used to assess the life domain include an overall life satisfaction question and a happiness question. The formats are:

In general, how satisfying do you find the way you're spending your life these days? Would you call it completely satisfying (), pretty satisfying (), or not very satisfying ()?

Taking all things together, how would you say things are these days? Would you say you're very happy (), pretty happy (), or not too happy () these days?

Marital Adjustment and Health were measured by a single item question shown below:

Taking all things together how would you describe your marriage. Would you say your marriage was very happy (), a little happier than average (), or not too happy ()?

Do you think your health is excellent (), good (), or poor ()?

In order to assess the alcohol consumption habits of the respondents it was necessary to soften the impact of the question by asking the respondents about coffee or tea and soad or pop. A combined grouping of questions was constructed and is included on page six of the questionnaire (see Appendix A).

Split-half reliabilities for the five dimensions of the Job Descriptive Index were computed using the Kuder-Richardson Formula 20 technique. In addition, the Spearman-Brown Prophecy Formula and the Kuder-Richardson Formula 21 scores were also computed. Item total correlations are indicated by the phi coefficients. These results are shown in Tables 6, 7, 8, 9 and 10. All scales used were deemed to have acceptable levels of reliability.

A copy of the questionnaire (see Appendix A) and additional information of scale reliabilities and validities (see Appendix D) are included in this paper.

TABLE 6

RELIABILITIES OF PAY SCALE

<u>Item</u>	<u>Phi</u>
Income adequate for normal expenses	.65
Satisfactory profit sharing	.22
Barely live on income	.70
Bad	.74
Income provides luxuries	.43
Insecure	.56
Less than I deserve	.47
Highly paid	.27
Underpaid	.53

Kuder - Richardson Formula 20	.81
Spearman - Brown Prophecy Formula	
Correction	.90
Kuder - Richardson Formula 21	.74

TABLE 7

RELIABILITIES OF SUPERVISION SCALE

<u>Item</u>	<u>Phi</u>	<u>Item</u>	<u>Phi</u>
Asks my advice	.52	Tells me where I	
Hard to please	.54	stand	.52
Impolite	.57	Annoying	.65
Praises good work	.63	Stubborn	.55
Tactful	.69	Knows job well	.56
Influential	.57	Bad	.55
Up-to-date	.60	Intelligent	.60
Doesn't supervise		Leaves me on my own	.46
enough	.46	Around when needed	.59
Quick-tempered	.54	Lazy	.56

Kuder - Richardson Formula 20	.93
Spearman - Brown Prophecy Formula	
Correction	.96
Kuder - Richardson Formula 21	.93

TABLE 8

RELIABILITIES OF CO-WORKER SCALE

<u>Item</u>	<u>Phi</u>	<u>Item</u>	<u>Phi</u>
Stimulating	.53	Talk too much	.50
Boring	.60	Smart	.65
Slow	.65	Lazy	.62
Ambitious	.57	Unpleasant	.52
Stupid	.53	No privacy	.45
Responsible	.55	Active	.55
Fast	.52	Narrow interest	.64
Intelligent	.60	Loyal	.55
Easy to make enemies	.48	Hard to meet	.45

Kuder - Richardson Formula 20	.92
Spearman - Brown Prophecy Formula Correction	.96
Kuder - Richardson Formula 21	.92

TABLE 9

RELIABILITIES OF PROMOTION SCALE

<u>Item</u>	<u>Phi</u>
Good opportunity for advancement	.78
Opportunity somewhat limited	.64
Promotion on ability	.67
Dead-end job	.63
Good chance for promotion	.77
Unfair promotion policy	.50
Infrequent promotion	.56
Regular Promotion	.53
Fairly good chance for promotion	.76

Kuder - Richardson Formula 20	.89
Spearman - Brown Prophecy Formula Correction	.94
Kuder - Richardson Formula 21	.88

TABLE 10

RELIABILITIES OF WORK ITSELF SCALE

<u>Item</u>	<u>Phi</u>	<u>Item</u>	<u>Phi</u>
Fascinating	.46	Useful	.32
Routine	.51	Tiresome	.55
Satisfying	.60	Healthful	.31
Boring	.56	Challenging	.57
Good	.56	On your feet	.18
Creative	.44	Frustrating	.35
Respected	.40	Simple	.44
Hot	.28	Endless	.31
Pleasant	.53	Gives sense of accomplishment	.55
Kuder - Richardson Formula 20		.84	
Spearman - Brown Prophecy Formula Correction		.91	
Kuder - Richardson Formula 21		.81	

CHAPTER 3

RESULTS

The Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner and Bent 1975) was used to perform all data analysis related to the present study.

Frequencies and histograms were obtained for all scales and demographic items. In addition, means, modes, medians, standard errors, standard deviations, minimums, maximums, ranges, variances, skewness, and kurtoses were computed and analyzed for all variables.

Pearson Product-Moment Correlations between measures from the job and life domains were computed. Partial (first-order) correlations were also computed to determine the possible effects of other variables on relationships uncovered in the zero-order correlational analysis. In addition, the sample was subdivided on the basis of various criteria to highlight any moderator effects which might have been masked in the partial correlational segment of the analysis. Pattern analysis of the sub-groups was undertaken to identify and explain possible moderator effects within the framework of the model being tested. In connection with the pattern analysis, correlation coefficients were standardized (using Z-transformations) and comparisons were made to identify statistically significant differences between sub-groupings.

Descriptive Statistics

An examination of the initial data distributions of the 911 usable cases indicated that a normal distribution was approximated for the sample. In particular, the values of the standard error, skewness and kurtosis were carefully scrutinized for all variables and supported this conclusion.

Pearson Product-Moment Correlations

Pearson Product-Moment Correlations were computed for all measures of job and life domains. (See List 1 for a key to the abbreviations used on all correlational tables). The results of this analysis are displayed in Table 11. It can be seen that, although most correlation coefficients are relatively small in magnitude, many are significant at the .001 level. A comparison of these results with the predictions of the three models (see Table 12) indicates that the relationships uncovered conform overwhelmingly to the predictions derived from the Generalized Model (29 out of 30 with 16 at .001 level). Indeed, of the thirty coefficients, only one correlation coefficient is in the direction that the Compensatory Model would predict (overall job satisfaction and alcohol consumption). However, this correlation involves the least reliable of the life domain scales (alcohol consumption). It is concluded, therefore, that Hypothesis 1 is supported for the entire sample.

The job scales which appear to be most highly related to the life dimensions are overall job satisfaction and JDI work. They are most highly related to the life scales over-

LIST 1

KEY TO CORRELATIONAL TABLE ABBREVIATIONS

Vertical Display

<u>Abbreviations</u>	<u>Meaning</u>
JOBSAT	Overall Job Satisfaction
JDIWORK	Job Descriptive Index - Work
JDIPAY	Job Descriptive Index - Pay
JDISUPR	Job Descriptive Index - Super- vision
JDICOWK	Job Descriptive Index - Co-Worker
JDIPROM	Job Descriptive Index - Promotion

Horizontal Display

<u>Abbreviations</u>	<u>Meaning</u>
LSAT	Overall Life Satisfaction
HAPP	Happiness
MARSTROA	Marital Adjustment
HEALTH	Health
DRKALC	Alcohol Consumption

TABLE 11

CORRELATIONS BETWEEN MEASURES OF JOB
SATISFACTION AND LIFE SATISFACTION

ENTIRE SAMPLE

	LSAT	HAPP	MARSTROA	HEALTH	DRKALC
JOB SAT	35 892	33 891	-17 675	08 831 013	05 883 057
JDIWORK	27 898	25 896	-11 682 002	13 847	-02 893 239
JDIPAY	17 894	17 892	-10 678 003	14 844	-11 889
JDISUPR	13 832	09 831 004	-07 624 053	11 779	-08 827 016
JDICOWK	14 879	08 878 008	-07 667 038	11 825	-03 875 210
JDIPROM	16 853	14 852	-06 641 075	14 799	-05 849

Note: xxx Correlation Coefficient - Decimals Omitted
xxx Degrees of Freedom
xxx Significance Level - Decimals Omitted - Blank
Space indicates the .001 level

TABLE 12
PREDICTIONS OF THE THREE MODELS

	LSAT	HAPP	MARSTROA	HEALTH	DRKALC
JOBSAT	+ - 0	+ - 0	- + 0	+ - 0	- + 0
JDIWORK	+ - 0	+ - 0	- + 0	+ - 0	- + 0
JDIPAY	+ - 0	+ - 0	- + 0	+ - 0	- + 0
JDISUPR	+ - 0	+ - 0	- + 0	+ - 0	- + 0
JDICOWK	+ - 0	+ - 0	- + 0	+ - 0	- + 0
JDIPROM	+ - 0	+ - 0	- + 0	+ - 0	- + 0

Generalized prediction - First Line
 Compensatory prediction - Second Line
 Segmentation prediction - Third Line

all life satisfaction and happiness. The weakest links are between the six job items and the life items marital adjustment, health and alcohol consumption. This general pattern prevailed throughout all analyses.

In addition to displaying the correlation coefficients and degrees of freedom, Table 12 displays all the significance levels. This practice is not normally followed in research of this sort but it was felt that an accurate test of the Segmentation Model required this information.

Partial Correlation Coefficients to Test Interactive Effects

Gillo (1973) states that whenever general relationships found for a surveyed sample are relatively low but significant there is reason to investigate whether the relationship between the variables of focus could be attributed to the influence of third variables, or that the relationships could be moderated by third variables which interact with the focus variables. Partial correlations were computed to test for possible interactive effects. The results of this procedure did not highlight any overall effect by any of the variables examined. These included city size, sex, age, education of the respondent, education of the spouse, marital status, family income, individual income, self-employment status, union membership, tenure on the job, job title, pension eligibility, proximity to retirement, collar color, industry group and hours worked per week. This list includes, but is not limited to, potential moderators outlined in Table 1. The general

pattern of correlation coefficients outlined for the entire sample was relatively stable controlling for each of these variables, thus indicating support for the Generalized Model.

Subgrouping of the Sample to Test for Interactive Effects

Gillo (1973) states that another test for third variable explanations is to recompute the hypothesized correlations for different subsets of the total sample. One might split the total sample into different age groups and recompute the hypothesized correlations; then do the same for the other demographic variables. It was decided that this procedure would be followed in the present study. An examination of most of the variables used in the partial correlation phase of the study was undertaken to determine if any effect on a variable was being masked by opposing directionality within the entire sample.

Although some interesting results were uncovered, the analysis of subsets did not indicate that either the Compensatory or Segmentation Model was supported. The overall pattern of predictions derived from the entire sample was, with few exceptions, repeated for each of the subsets. The relationships between the scales overall job satisfaction and JDI work, and overall life satisfaction and happiness, were universally in the direction predicted by the Generalized Model. Those variations from the pattern that did occur were confined to correlations involving the job scales of JDI pay, JDI supervision, JDI co-workers, JDI promotion and the life scales

of marital adjustment, health, alcohol consumption. It should once again be pointed out that these life items were the least reliable measures. Results of the pattern analysis are presented below.

Pattern Analysis

While overall support for the Generalized Model was found in prior analysis, it was noted that, although in the same direction, the strength of the predicted relationships varied within subgroups on individual measures. This fact required further investigation. It was decided that a detailed examination of the subgroups on the basis of overall job satisfaction and overall life satisfaction would be conducted.

In addition, a supplementary analysis of the relationships between overall job satisfaction and happiness and the five dimensions of the JDI and overall life satisfaction and happiness was undertaken. Because of the lack of consistency in previous analyses, the life domain items of marital adjustment, health and alcohol consumption were excluded from this investigation.

The hypotheses tested were:

Hypothesis 1a. The strength of the relationship between job satisfaction and life satisfaction will be greater for men.

Result. A one tailed test of the standardized (Z - transformation) correlation coefficients show a significant difference ($P < .05$) in the strength of the relationship for

men ($r = .40$) and women ($r = .29$). This finding is at odds with a recent study of Kavanagh and Halpern (1977) which found no difference between the groups. Aside from the issues of measurement devices used, a possible explanation may be found in the samples selected. The university setting used by Kavanagh and Halpern is a more progressive setting than most business concerns and is more likely to react to changes in social norms and values; thus the effect of the women's movement may indeed be further advanced in this setting than in a more broad based group.

Hypothesis 1b. The strength of the relationship between job satisfaction and life satisfaction will increase with age.

Result. This hypothesis was only weakly supported, for although one might interpret a general movement in the direction predicted critical irregularities exist (see Table 13). It can be noted that the relationship is virtually the same for all people under forty years of age, it tends to peak between the ages of forty to forty-nine, takes a sharp drop for the next age grouping and rises again as one nears retirement age. Indeed, there is a significant difference in the strength of the relationship between the largest and smallest correlation coefficient ($P < .05$). However, the middle age group (forty - forty-nine years) exhibited the greatest relationship. It may be that people who are in the middle years view work as the major life role and that this in turn effects other life roles.

TABLE 13
PATTERN ANALYSIS FOR AGE

<u>Age in Years</u>	<u>Correlation Coefficient (r)</u>
20 - 29	.28
30 - 39	.28
40 - 49	.45
50 - 59	.30
60 - 69	.43

Hypothesis 1c. The strength of the relationship between job satisfaction and life satisfaction will increase as educational level increases.

Result. This hypothesis was strongly supported. Indeed those with graduate degrees ($r = .58$) were significantly different ($P < .001$) than those with grammar school education ($r = .07$). Furthermore, the trend is precisely as predicted (refer to Table 14). When a person spends more time preparing for a career, he may view this work as his central life interest and it may, therefore, have a strong effect on other life endeavors and attitudes. An interesting aside is that the same general pattern develops when the education of the spouse is studied (see Table 15). People may tend to marry those who are compatible with them, at least educationally.

TABLE 14
PATTERN ANALYSIS FOR EDUCATION - RESPONDENT

<u>Education</u>	<u>Correlation Coefficient (r)</u>
Grammar School	.07
High School	.32
College Degree	.44
Graduate Degree	.58

TABLE 15

PATTERN ANALYSIS FOR EDUCATION - SPOUSE

<u>Education</u>	<u>Correlation Coefficient (r)</u>
Grammar School	.22
High School	.33
College Degree	.46
Graduate Degree	NA

Hypothesis 1d. The strength of the relationship between job satisfaction and life satisfaction will be greatest for married people.

Result. This hypothesis was weakly supported (Table 16) the difference was only significant ($P < .05$) for a comparison of married ($r = .37$) versus widowed ($r = .19$) subjects. This finding is consistent with earlier research which found that unmarried people have a lower sense of well-being, particularly if they were once married (Bradburn 1969).

TABLE 16

PATTERN ANALYSIS FOR MARITAL STATUS

<u>Marital Status</u>	<u>Correlation Coefficients (r)</u>
Married	.37
Single	.33
Widowed	.19

Hypothesis 1e. The strength of the relationship between job satisfaction and life satisfaction will increase as family income increases.

Result. The data tend to support this proposition (see Table 17). The trend is consistent with the exception of one level of income (\$20,000 to \$24,999). This dip cannot

be adequately explained at this point in time. This overall upward trend is well documented (Kornhauser 1965; Bradburn 1969; Sheppard and Herrick 1972; Iris and Barrett 1972). In fact the difference in the strength of the relationship is significant ($P < .01$) for the highest ($r = .51$) and the lowest ($r = .13$) family income groups. This general pattern prevails when one considers individual income (refer to Table 18) moreover the difference between the highest group ($r = .55$) and the lowest group ($r = .09$) is significant at a high level ($P < .001$).

TABLE 17

PATTERN ANALYSIS FOR FAMILY INCOME

<u>Family Income</u>	<u>Correlation Coefficient (r)</u>
\$1,000 - 4,999	.13
5,000 - 8,999	.24
9,000 - 11,999	.32
12,000 - 14,999	.39
15,000 - 19,999	.44
20,000 - 24,999	.29
25,000 and up	.51

TABLE 18

PATTERN ANALYSIS FOR INDIVIDUAL INCOME

<u>Individual Income</u>	<u>Correlation Coefficient (r)</u>
Under \$4,000	.09
4,000 - 7,999	.29
8,000 - 11,999	.34
12,000 - 14,999	.46
15,000 - 19,999	.41
20,000 - 24,999	.31
25,000 and up	.55

Hypothesis 1f. The strength of the relationship between job satisfaction and life satisfaction will be greater

for self-employed people.

Result. The difference observed between the two groups was significant ($P < .05$). Self-employed people exhibited a stronger relationship ($r = .46$) than those who were not self-employed ($r = .34$). This is consistent with the findings of Quinn et al. (1974). Thus, a man who opts to work for himself may, by definition, assign work a central role in his life and it may have significant impact on other phases of his life.

Hypothesis 1g. The strength of the relationship between job satisfaction and life satisfaction will be greater for union members.

Result. No significant difference was observed in the relationship for union ($r = .30$) and non-union ($r = .38$) employees. The fact is that a stronger relationship existed for the latter group, which is contrary to the hypothesized effect. This hypothesis was not supported.

Hypothesis 1h. The strength of the relationship between job satisfaction and life satisfaction will increase as tenure increases.

Result. The results of a test of this hypothesis tend to parallel the analysis of age as a moderator. In fact, the same pattern prevails, with an increase then a decrease in magnitude (see Table 19). This inverted U shaped curve, may be the result of an adjustment process, whereby the individual devotes himself to his job but beyond a certain number of years in the same position, his focus changes. It should

be pointed out that the difference between the weakest link ($r = .22$) and the strongest link ($r = .49$) is significant ($P < .01$).

TABLE 19
PATTERN ANALYSIS FOR TENURE ON THE JOB

<u>Tenure on the Job</u>	<u>Correlation Coefficient (r)</u>
Less than 1 year	.22
1 - 5 years	.30
6 - 10 years	.49
11 - 15 years	.36
16 or more years	.36

Hypothesis 1i. The strength of the relationship between job satisfaction and life satisfaction will be greater for high level jobs.

Result. The results of this analysis (refer to Table 20) tend to support the hypothesis. When one considers Professional and Technical, Managers and Administrators, and Sales people as high level jobs; Service Employees as middle level jobs; and Operatives and Clerical as lower level jobs, the predicted pattern results. The only significant difference ($P < .05$), however, is between the highest (Sales $r = .45$) and lowest (Clerical $r = .20$) level. The level of ones job tends to be related to one's education and one's income. Therefore, one would expect this pattern given prior analyses and prior research (Kavanagh and Halpern 1977; Kirsh and Lengermann 1972; Kornhauser 1965; Sheppard and Herrick 1972).

TABLE 20
PATTERN ANALYSIS FOR JOB TITLE

<u>Job Title</u>	<u>Correlation Coefficient (r)</u>
<u>High Level</u>	
Professional, Technical	.39
Managers & Administrators	.40
Sales	.45
<u>Middle Level</u>	
Service	.37
<u>Low Level</u>	
Clerical	.20
Operatives	.28

Hypothesis 1j. The strength of the relationship between job satisfaction and life satisfaction will be greater for white-collar workers than for blue-collar workers.

Result. Although the predicted pattern resulted and white-collar workers ($r = .37$) had a stronger relationship than blue-collar workers ($r = .30$), the difference was not significant (see Table 21). In fact the difference between the highest level ($r = .40$) and the lowest ($r = .30$) was not significant. The finding with regard to white and blue-collar workers is consistent with prior research (Quinn et al. 1974). The fact that collar color and union membership (see Hypothesis 1g) did not show significance may be indicative of a narrowing of the distinction that exists between these groups.

TABLE 21

PATTERN ANALYSIS FOR COLLAR COLOR

<u>Collar Color</u>	<u>Correlation Coefficient (r)</u>
White	.37
Blue	.31
Manager	.37
Professional	.40

Hypothesis 1k. The strength of the relationship between job satisfaction and life satisfaction will increase as city size decreases.

Result. The results of the test of this hypothesis are mixed (refer to Table 22). It appears that for large cities the relationship is weaker ($r = .37$) than for most other city sizes. The most surprising result is that the lowest relationship of all ($r = .23$) is for small cities. Just as large metropolitan areas may instill negative attitudes toward work, so too might one feel restricted in a relatively small town. Indeed this question requires further research.

TABLE 22

PATTERN ANALYSIS FOR CITY SIZE

<u>City Size</u>	<u>Correlation Coefficient (r)</u>
2 million and over	.37
1 to under 2 million	.45
500,000 to under 1 million	.47
250,000 to under 500,000	.40
50,000 to under 250,000	.47
Not Standard Metropolitan Statistical Area	.23

Although overall support for the Generalized Model has been established, the Pattern Analysis uncovers some inter-

esting and meaningful differences within various subgroups. Indeed some of these differences were statistically significant and may require further examination on both the conceptual and practical levels.

Supplemental Analysis

The life domain variable happiness, was tested against all six job satisfaction measures; also the overall life satisfaction item was examined in relation to each of the JDI scales. Overall, the findings of the supplementary analysis were not consistent with the findings of the Pattern Analysis conducted on overall life satisfaction and overall job satisfaction. Even when the trends were similar, a majority of the differences uncovered were not significant. However, the results derived from the Pattern Analysis of tenure closely approximate the inverted U shaped curve uncovered in the original analysis. Furthermore, the job level moderator also appears to receive some support in this analysis.

This overall lack of support may be a function of the lack of a clear cut relationship uncovered in earlier analysis between the JDI and the life domain items. An attempt at developing a composite score for the JDI was made but this proved fruitless.

CHAPTER 4

CONCLUSIONS

The results presented in the previous chapter are discussed in connection with several issues concerning the relationship between job satisfaction, and life satisfaction. In addition, an examination of the limitations of this research and some possible avenues for future research is also undertaken.

Discussion

The purpose of this study was to test three models which have been proposed to predict the relationship between job satisfaction and life satisfaction. The predictions made are a positive correlation (Generalized Model), a negative correlation (Compensatory Model), and a zero correlation (Segmentation Model). These predictions in turn have different implications for people on and off the job as well as for students of organizational behavior, managers, government officials, union representatives and other groups in our society.

In addition to testing the predictions of the three models, an extensive examination of possible moderator variables was also undertaken. Moderator effects, where uncovered, have serious implications for the aforementioned groups.

The present study provided support for a Generalized Model. There was virtually no support for either the Compensatory Model or the Segmentation Model, for the entire sample or any subgroup of the sample (no moderator effects). These results are consistent with much of the prior research in this area (Bradburn 1969; Friedlander 1966; Kornhauser 1965).

The more intriguing findings relate to the moderator effects within the framework of the Generalized Model. This study examined most of the moderators that had been considered in prior research. No significant differences in the strength of the positive relationship were uncovered on the basis of union membership or between white and blue-collar workers. However, significant differences were derived on the bases of sex, age, education, marital status, income (family and individual), self-employment, tenure, job level, collar-color (including professionals and managers) and city size.

On the basis of the Pattern Analyses performed, it appears that the strength of the positive relationship between job satisfaction and life satisfaction increases as a function of income (Tables 17 and 18), education (Table 19) or job level (Table 20). It can be argued that these three factors are related. Nevertheless, the implications of the effect are clear, namely, that people who attain higher levels of education (and, therefore, income and job level) also acquire a greater degree of self-investment in work and ultimately a stronger relationship between work and life. When tenure

is used as a moderator, the results approximates an inverted U shaped curve (see Table 19). People appear to build to a peak of involvement with a particular job (6 to 10 years) and then there is a decline.

The consistent support derived from the data for the Generalized Model has tremendous significance to our society, for it may well be that "work is still the most central part of a person's life" (Gillo 1973). The satisfactions experienced on the job appear to be related to the satisfactions, experienced in other spheres of life. Indeed, the individual role as a worker may effect his role as citizen, husband, father or neighbor.

A survey conducted by Quinn et al. (1974) indicated that thirty-six percent of American workers had more education than they thought they needed to do their jobs. The present study did not test this relationship. However, if this finding is valid, as the educational level of the population rises this percentage will rise, thus increasing the number of potentially dissatisfied workers and citizens. This is so because the positive linkage between job satisfaction (dissatisfaction) and life satisfaction (dissatisfaction) becomes stronger as education level rises (see Table 14). Furthermore, more educated workers stress challenge in work as most important to their job satisfaction (Quinn et al. 1974). If jobs are not made more challenging, these more educated workers will be more dissatisfied both on and off the job.

Ginsberg (1972) adds that, "the more young people in-

vest in preparing for work and careers, the higher their expectations and the greater their potential source of dissatisfaction if their goals are not fulfilled."

Many organizations have not yet appreciated that the principal of joint optimization may imply changes in their technology which make it more appropriate to the changing characteristics of individuals and social groups. In the long run it is uneconomical to have a technology that violates human characteristics (Clarke 1972).

Unions must also consider the consequences of their actions if indeed the link between the job domain and other spheres exists. Some unions in the United States view job changes aimed at increasing quality of working life as a threat to the goals and practices that have become built into collective bargaining. The strategic value of collective agreements relative to such issues as job security and seniority is seen to be dependent on the stability of the content of the job. Thus economic group solidarity is seen as more basic than individual job enrichment (Dellamonte 1972). This of course conflicts with the desire of more educated workers for more challenging jobs.

A central goal of our society should be the development of institutions of work that stimulate the creative abilities of workers; activeness, cooperativeness, interest in learning, and self-development, all of which encourage positive attitudes of citizenship and spark the hope necessary to build a more just and humane society (Herrick and Maccoby 1972).

Even if one assumes that the sequence is from other roles to the work role, the fact that this positive correlation exists is still highly significant. For regardless of the direction of the causal arrow, the dissatisfied person appears to be dissatisfied in many life endeavors. The effects of this linkage may be that dysfunctional behavior is exhibited both on and off the job. Excessive drinking, drug use, sabotage, turnover, absenteeism, increased incidence of divorce, child abuse and other crimes may be attributed to this generalized effect.

If managers, employers, government officials and others in influential positions are laboring under the erroneous assumption that the Compensatory Model is valid, the policies enacted by them may have negative consequences for all concerned. Managers may assume, for example, that an individual who they perceive as well paid can compensate for low quality of working life by pursuing satisfactions off the job (an instrumental orientation). Even if one assumes that work as the central life interest is no longer as widespread as in the past, adherence to the compensatory hypothesis may still result in dysfunctional societal consequences.

Similar problems would result if the Segmentation Model is assumed valid. Each of these models makes it possible for those in positions of authority to reduce their responsibilities to the general working population while on the job.

Furthermore, assumptions made based upon possible moderator effects may also lead to policies and practices which

are dysfunctional. For example, although age appears to have an effect on the strength of the relationships predicted by the Generalized Model, there is no evidence that either of the other models is supported for a particular age group. The same state of affairs appears to exist with regard to the moderators city size, education, family income, individual income, tenure on the job, job title, union membership, marital status and self-employment.

It should be noted, however, that findings related to the strength of relationships predicted by the Generalized Model are of practical significance. For certain subgroups where a strong link exists (e.g., highly educated workers) improving of job satisfaction as a means of improving life satisfaction may be quite successful. Whereas improvement for weakly linked groups (e.g., young workers) may prove less effective.

Limitations and Suggestions

Although many moderator variables were examined in the present study, it is possible that other variables may indeed have bearing on the relationships tested. For example, it may be important to determine an individual's feelings of control over his environment.

Future studies might also find it useful to identify the possible effects of the level of needs being addressed by the individual. As Wahba and Bridwell (1973) have implied individuals concerned with lower level needs (e.g., physiological and safety needs) may indeed have significantly differ-

ent patterns than those concerned with higher order needs (e.g., autonomy and self-actualization).

Furthermore, a more detailed examination of life satisfaction items should be undertaken and a comprehensive effort should be made to more clearly define this construct. The items related to health, marital adjustment and drinking habits appear to be deficient as indicators of life satisfaction. Based upon the obviously smaller number of people who responded to these questions it may well be that these items are felt to be offensive or at least irritating. Because of this, they were dropped from the latter phases of analysis (e.g., Pattern Analysis). In addition to exploring different measures of the life domain, the predictor variables used should also be reevaluated.

The present study focused mainly on attitudinal measures; future studies should be designed to measure the relationships between behavior in the work setting and other settings. This may be a far more fruitful approach. Finally, future studies should attempt to obtain longitudinal data, so as to allow the researchers to make clearer causal inferences. Indeed, the emphasis of research on people in organizations might have to parallel the change in emphasis in the study of organizations themselves. Traditionally organizations were viewed as closed-systems and were studied with little or no reference to external factors. As the field matured an open-systems approach developed which viewed the organization as interacting with and being affected by exter-

nal factors. People work in organizations but exist in many other spheres. It may well be that in order to understand the attitudes and behaviors of people in a specific setting we must study them in many settings.

A future design might include comparisons of:

1. Persons who have gone from a bad job to a good job
2. Persons who have stayed on the same job
3. Persons who have gone from a good job to a bad job

In each of these categories the individuals should have at least one year on their current job, and measurements should be taken at two or more points in time.

The study of the relationships between work and life appears to be gaining momentum. Future research should build upon the modest foundations that have been laid thus far. Greater emphasis on clarity of definitions and more precise measurements may lead to fruitful and meaningful results.

APPENDIX A

QUESTIONNAIRE

1-5
6
7
8

Different people have different feelings about various aspects of their lives, and, of course, we realize that these feelings change from time to time. We are interested in your present attitudes towards several aspects of life.

Please answer the following questions as they apply to you.

1. In general, how satisfying do you find the way you're spending your life these days? Would you call it completely satisfying ()1, pretty satisfying ()2, or not very satisfying ()3. 9-
2. Taking all things together, how would you say things are these days? Would you say you're very happy ()1, pretty happy ()2, or not too happy ()3 these days. 10-
3. All in all, how satisfied would you say you are with your job? Would you say you are very satisfied ()1, somewhat satisfied ()2, not too satisfied ()3, or not at all satisfied ()4. 11-
4. Put an X under the "Yes" column if the item describes an aspect of your work. Put an X under the "No" column if the item does not describe your work. Put an X under the "?" column if you cannot decide.

	"Yes"	"No"	"?"		"Yes"	"No"	"?"	
Fascinating...	()3	()0	()1-12	Useful	()3	()0	()1	21-
Routine.....	()0	()3	()1-13	Tiresome.....	()0	()3	()1	22-
Satisfying ...	()3	()0	()1-14	Healthful.....	()3	()0	()1	23-
Boring.....	()0	()3	()1-15	Challenging	()3	()0	()1	24-
Good.....	()3	()0	()1-16	On your feet.....	()0	()3	()1	25-
Creative.....	()3	()0	()1-17	Frustrating	()0	()3	()1	26-
Respected.....	()3	()0	()1-18	Simple.....	()0	()3	()1	27-
Hot.....	()0	()3	()1-19	Endless.....	()0	()3	()1	28-
Pleasant	()3	()0	()1-20	Gives sense of accomplishment...	()3	()0	()1	29-

5. Indicate whether you "Strongly Agree", "Agree", are "Neutral", "Disagree", "Strongly Disagree" with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
	(5)	(4)	(3)	(2)	(1)	
There is <u>not</u> much that I can do about most of the important problems we face today.	()	()	()	()	()	30-
Things have become so complicated in the world today that I really don't understand what is going on.	()	()	()	()	()	31-
In order to get ahead in the world today, you are almost forced to do some things which are not right.	()	()	()	()	()	32-
I am <u>not</u> interested in the T.V. Programs, movies or magazines that most people seem to like.	()	()	()	()	()	33-
I often feel lonely.	()	()	()	()	()	34-
I don't really enjoy most of the work that I do, but I feel that I must do it to have other things that I need	()	()	()	()	()	35-

APPENDIX A - Continued

2.

6. Put an X under the "Yes" column if the item describes an aspect of your pay. Put an X under the "No" column if the item does not describe your pay. Put an X under the "?" column if you cannot decide.

	"Yes"	"No"	"?"	
Income adequate for normal expenses.....	() 3	() 0	() 1	36-
Satisfactory profit sharing	() 3	() 0	() 1	37-
Barely live on income.....	() 0	() 3	() 1	38-
5nd.....	() 0	() 3	() 1	39-
Income provides luxuries.....	() 3	() 0	() 1	40-
Insecure	() 0	() 3	() 1	41-
Less than I deserve.....	() 0	() 3	() 1	42-
Overly paid	() 3	() 0	() 1	43-
Underpaid	() 0	() 3	() 1	44-

7. Do you think your health is excellent () 1, good () 2, or poor () 3? 45-

8. People occasionally feel bothered by certain kinds of things in their work. Consider the following list of things that sometimes bother people and indicate how frequently you feel bothered by each of them.

	Nearly all the time (5)	Rather Often (4)	Some- times (3)	Rarely (2)	Never (1)	
The fact that you can't get information to carry out your job.....	()	()	()	()	()	46-
Not knowing just what the people you work with expect of you.....	()	()	()	()	()	47-
Thinking that the amount of work you have to do may interfere with how well it gets done.	()	()	()	()	()	48-
Feeling that you have to do things that are against your better judgement.....	()	()	()	()	()	49-
Being unclear on just what the scope and responsibilities of your job are.....	()	()	()	()	()	50-
Feeling unable to influence your immediate supervisor's decisions and his actions that affect you.	()	()	()	()	()	51-
Feeling that you have too little authority to carry out the responsibilities assigned to you.....	()	()	()	()	()	52-
Not knowing what your supervisor thinks of you; how he evaluates your performance.....	()	()	()	()	()	53-

9. Do you feel that your job puts some stress and pressure on you beyond that which most people experience in their jobs? Would you say most of the time () 1, 54- some of the time () 2, or almost never () 3.

10. Indicate the last time you experienced stress or pressure on your job?

Today	() 1	
Yesterday	() 2	
2 - 3 days ago	() 3	55-
4 - 5 days ago	() 4	
6 - 7 days ago	() 5	
2 weeks ago	() 6	
3 weeks ago	() 7	
Other (SPECIFY) _____	8	

11. Have there been any instances on your job in the last year or so when the pressure was so great that you felt that you could not handle the situation?

APPENDIX A - Continued

3.

12. Put an X under the "Yes" column if the item describes an aspect of the supervision you receive from your supervisor. Put an X under the "No" column if the item does not describe the supervision you receive from your supervisor. Put an X under the "?" column if you cannot decide.

	"Yes"	"No"	"?"		"Yes"	"No"	"?"	
Asks my advice	() 3	() 0	() 1	57- Tells me where I	() 3	() 0	() 1	66-
Hard to please	() 0	() 3	() 1	58- stand	() 3	() 0	() 1	67-
Impolite.....	() 0	() 3	() 1	59- Annoying.....	() 0	() 3	() 1	68-
Praises good work.....	() 3	() 0	() 1	60- Stubborn.....	() 0	() 3	() 1	69-
Tactful.....	() 3	() 0	() 1	61- Knows job well.....	() 3	() 0	() 1	70-
Intentional.....	() 3	() 0	() 1	62- Bad.....	() 0	() 3	() 1	71-
Up-to-date	() 3	() 0	() 1	63- Intelligent	() 3	() 0	() 1	72-
Doesn't supervise enough...	() 0	() 3	() 1	64- Leaves me on my own	() 3	() 0	() 1	73-
Quick-tempered	() 0	() 3	() 1	65- Around when needed.	() 3	() 0	() 1	74-
				Lazy.....	() 0	() 3	() 1	

13. Indicate whether you "Strongly Agree", "Agree", are "Neutral", "Disagree", "Strongly Disagree" with the following statements about your job.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	(1)	(2)	(3)	(4)	(5)
<u>I do things:</u>					
that make me feel safe when I am doing					
them.....	()	()	()	()	() 75-
which make me feel relaxed	()	()	()	()	() 76-
which I am content to do	()	()	()	()	() 77-
that are easy for me	()	()	()	()	() 78-
that are familiar	()	()	()	()	() 79-
that look like they will benefit me in					
the future	()	()	()	()	() 80-
which make me feel comfortable	()	()	()	()	() 9-
with people who are cooperative	()	()	()	()	() 10-
when others are around	()	()	()	()	() 11-
in which I have the opportunity to					
develop close friendships..	()	()	()	()	() 12-
which are helpful to others	()	()	()	()	() 13-
best when others are around	()	()	()	()	() 14-
with people who are friendly	()	()	()	()	() 15-
where I am liked by others	()	()	()	()	() 16-
that make me feel intelligent.....	()	()	()	()	() 17-
where others tell me how smart I am	()	()	()	()	() 18-
which give me a feeling of prestige	()	()	()	()	() 19-
that give me a feeling of self-esteem....	()	()	()	()	() 20-
that make me feel smart	()	()	()	()	() 21-
for which my accomplishments are					
recognized	()	()	()	()	() 22-
that I feel I do better than anyone else.	()	()	()	()	() 23-
that I want to do.....	()	()	()	()	() 24-
where I can find solutions to problems on					
my own.....	()	()	()	()	() 25-
where I can determine the way they are					
done.....	()	()	()	()	() 26-
where I can define the problem to be					
worked on	()	()	()	()	() 27-
where I can be independent.....	()	()	()	()	() 28-
in which I have a lot of opportunity for					
independent thought and action.	()	()	()	()	() 29-
where I have a lot of authority	()	()	()	()	() 30-
where I can be creative.....	()	()	()	()	() 31-
I am dedicated to	()	()	()	()	() 32-
where I can perform up to my abilities ..	()	()	()	()	() 33-
which give me a feeling of worthwhile					
accomplishment.....	()	()	()	()	() 34-
that give me a feeling of self-fulfill-					
ment.....	()	()	()	()	() 35-
where I can be imaginative.....	()	()	()	()	() 36-
that allow me to realize my potential-					

APPENDIX A- Continued

4.

We are now going to ask you to do something a little different. In Q's 14 through 19 we are offering you a limited number of choices in dealing with particular situations. We would like you to select an answer from the limited number of choices. Select the choice you feel is most appropriate.

14. If by some chance you had enough money to live comfortably without working, do you think you would work anyway ()1, or not work ()2? 38-
15. Which kind of work would you rather have? 39-
 Average pay from work that is looked down on by the people you know ()1
 Low pay from work that is respected by the people you know()2
16. If you were out of work, which would you rather do? Would you rather go on welfare ()1, or take a job as a car washer that paid the same as welfare ()2? 40-
17. Is the most important thing about getting a promotion getting more pay ()1, or getting more respect from friends and neighbors ()2? 41-
18. Which job would you choose if you could be sure of keeping either job?
 Better than average pay as a truck driver ()1 42-
 Less than average pay as a bank clerk.....()2
19. If you could be sure that your income would go up steadily without getting a promotion would you care about being promoted? Yes ()1 No ()2 43-

20. Put an X under the "Yes" column if the item describes an aspect of people at your job. Put an X under the "No" column if the item does not describe an aspect of people at your job. Put an X under the "?" column if you cannot decide.

	"Yes"	"No"	"?"		"Yes"	"No"	"?"	
Stimulating	()3	()0	()1	44- Talk to much.....	()0	()3	()1	53-
Boring	()0	()3	()1	45- Smart	()3	()0	()1	54-
Slow	()0	()3	()1	46- Lazy.....	()0	()3	()1	55-
Ambitious	()3	()0	()1	47- Unpleasant.....	()0	()3	()1	56-
Stupid.....	()0	()3	()1	48- No Privacy	()0	()3	()1	57-
Responsible	()3	()0	()1	49- Active.....	()3	()0	()1	58-
Fast.....	()3	()0	()1	50- Narrow Interest....	()0	()3	()1	59-
Intelligent.....	()3	()0	()1	51- Loyal.....	()3	()0	()1	60-
Easy to make enemies...	()0	()3	()1	52- Hard to meet	()0	()3	()1	61-

In Q's 21 through 24 we are concerned with some common problems which bother people, and we would like to know how often each of them happens to you.

21. How often are you bothered by:

	Several times a week	About once a week	Several times a month	About once a month	Once every few months	Almost never
Trouble getting to sleep.....	(6)	(5)	(4)	(3)	(2)	(1)
Headaches	()	()	()	()	()	()
Upset stomach	()	()	()	()	()	()
Gas or bloated feeling	()	()	()	()	()	()

22. Most people have days when they feel pretty "blue" or depressed during most of the day. How often does this happen to you?

- Two or three times a week... ()1 66-
 About once a week ()2
 Once or twice a month ()3
 About once a month ()4

APPENDIX A - Continued

23. Most people have days when they feel tired or worn out during a good part of the day. How often does this happen to you?
- Two or three times a week ... () 1 67-
 - About once a week () 2
 - Once or twice a month () 3
 - About once a month () 4
 - Less than once a month () 5
- How often do you feel nervous, tense, or edgy while on the job?
- More than 50% of the time ... () 1 68-
 - About 50% of the time () 2
 - About 25% of the time () 3
 - About 10% of the time () 4
 - About 5% of the time () 5
 - Very rarely or never () 5

25. Indicate whether you "Strongly Agree", "Agree", are "Neutral", "Disagree", "Strongly Disagree" with the following statements:

	<u>Strongly</u> <u>Agree</u> (5)	<u>Agree</u> (4)	<u>Neutral</u> (3)	<u>Disagree</u> (2)	<u>Strongly</u> <u>Disagree</u> (1)	
I feel that I'm a person of worth, at least on an equal plane with others	()	()	()	()	()	69-
I feel that I have a number of good qualities	()	()	()	()	()	70-
All in all, I am inclined to feel that I am a failure	()	()	()	()	()	71-
I am able to do things as well as most other people	()	()	()	()	()	72-
I feel I do not have much to be proud of	()	()	()	()	()	73-
I take a positive attitude toward myself	()	()	()	()	()	74-
On the whole, I am satisfied with myself	()	()	()	()	()	75-
I wish I could have more respect for myself	()	()	()	()	()	76-
I certainly feel useless at times	()	()	()	()	()	77-
At times I think I am no good at all.....	()	()	()	()	()	78-

26. Put an X under the "Yes" column if the item describes an aspect of promotions at your job. Put an X under the "No" column if the item does not describe promotions at your job. Put an X under the "?" column if you cannot decide.

	<u>"Yes"</u>	<u>"No"</u>	<u>"?"</u>	
Good opportunity for advancement.....	() 3	() 0	() 1	79-
Opportunity somewhat limited	() 0	() 3	() 1	80-
Promotion on ability	() 3	() 0	() 1	9-
Dead-end job.....	() 0	() 3	() 1	10-
Good chance for promotion.....	() 3	() 0	() 1	11-
Unfair promotion policy	() 0	() 3	() 1	12-
Infrequent promotion	() 0	() 3	() 1	13-
Regular promotion	() 3	() 0	() 1	14-

APPENDIX A - Continued

6.

If you are not married skip to Q. 28.

27. It is known that in every relationship people go through pleasant and unpleasant experiences over a period of time. The next series of questions deals with some of your experiences with your spouse.

- a) Would you say that you spend a lot of time ()1, a moderate amount of time ()2, or relatively little time ()3 doing things together with your wife/husband? 16-
- b) Did your wife/husband do anything during the past week which particularly pleased you, or made you happy? Yes ()1 No ()2 17-
- c) Did your wife/husband do anything during the past week which particularly bothered or upset you? Yes ()1 No ()2 18-
- d) Taking all things together how would you describe your marriage. Would you say that your marriage was very happy ()1, a little happier than average ()2, or not too happy ()3. 19-

28. Do you ever consume any of the following:
- | | | | |
|----------------------------------------------------|------------|-----------|-----|
| | <u>Yes</u> | <u>No</u> | |
| | (1) | (2) | |
| Coffee or Tea | () | () | 20- |
| Soft Drinks or Soda Pop | () | () | 21- |
| Beer, Whisky, Wine or any Alcoholic Beverage | () | () | 22- |

IF NO TO ALL THREE TYPES LISTED ABOVE, SKIP TO THE INSTRUCTION PRECEDING Q. 29

OTHERWISE, ANSWER 28b and c FOR EACH PRODUCT X'd UNDER THE YES COLUMN ABOVE.

- b) How many times during the last week did you consume.....
- | | | | |
|--------------------------------|------------------|----------------------|--------------------------------|
| | <u>Coffee or</u> | <u>Soft Drink</u> | <u>Beer, Whisky, Wine</u> |
| | <u>Tea (23)</u> | <u>Soda Pop (24)</u> | <u>Alcoholic Beverage (25)</u> |
| None last week | ()1 | ()1 | ()1 |
| Once or twice | ()2 | ()2 | ()2 |
| Three or four times | ()3 | ()3 | ()3 |
| Nearly everyday | ()4 | ()4 | ()4 |
| Once a day | ()5 | ()5 | ()5 |
| Two times a day..... | ()6 | ()6 | ()6 |
| Three or more times a day..... | ()7 | ()7 | ()7 |
- c) Was your consumption of Coffee/Tea; Soft Drink/Soda Pop; Beer, Whisky, etc., for last week more or less often than usual?
- | | | | |
|----------------------|-----------|-----------|-----------|
| More Often | ()1 (26) | ()1 (27) | ()1 (28) |
| Less Often | ()2 | ()2 | ()2 |
| About the same | ()3 | ()3 | ()3 |

We are interested in talking to people from all over the country, that is, people with different kinds of backgrounds, ideas and beliefs. The following questions deal with certain facts about you and your family. 29-

29. Please list below; each on a separate line, all the people who make up your household at the present time. List only those family members currently living at home. include yourself and indicate the other members as "husband", "wife", "son", "mother-in-law", etc., and list their sex and age as of their last birthday. 30- 31- 32-

Do NOT include persons who are living in your household who are not members of your family, such as, a "boarder", "cook", "hired hand", etc. 33-

Remember indicate family members as "husband", "wife", "son", etc. 34-

	<u>MALE</u>	<u>FEMALE</u>	<u>AGE</u>		<u>MALE</u>	<u>FEMALE</u>	<u>AGE</u>	
Yourself	()	()	()	_____	()	()	()	35-
.....	()	()	()	_____	()	()	()	36-
.....	()	()	()	_____	()	()	()	

APPENDIX A - Continued

7.

30. We would now like to find out about the female working members of your household. List below the names of each female 18 years of age or older who is currently working. If any female members of your household are students who are employed in part-time positions, either throughout the year or for the summer only, please indicate them separately below.

NAME	AGE	FULL-TIME	PART-TIME	STUDENTS EMPLOYED	
				PART-TIME	
_____	_____	()	()	()	41-
_____	_____	()	()	()	42-
_____	_____	()	()	()	43-
_____	_____	()	()	()	44-

31. Please check the highest grade you have completed:

Grade	Less than 5 yrs. () ⁴⁶	High School:	1 - 3 yrs. () ⁴⁷	College:	1 - 3 yrs () ⁴⁸
School:	5 - 7 yrs. () ²	School:	4 years () ²		4 or more yrs () ²
	8 yrs. () ³		Graduated () ³		Graduated () ³

SPECIFY: Undergraduate College Degree _____ Graduate Degree(s) _____⁴⁹⁻

IF NOT CURRENTLY MARRIED SKIP TO Q. 32

Please check the highest grade your wife/husband has completed:

Grade	Less than 5 yrs. () ⁵⁰	High School:	1 - 3 yrs. () ⁵¹	College:	1 - 3 yrs () ⁵²
School:	5 - 7 yrs. () ²	School:	4 years () ²		4 or more yrs () ²
	8 yrs. () ³		Graduated () ³		Graduated () ³

SPECIFY: Undergraduate College Degree _____ Graduate Degree(s) _____⁵³⁻

32. Are you currently married ()¹, single ()², widowed ()³, divorced ()⁴ or separated ()⁵? 54-

33. Please check below your family's total income for 1974 before deductions for taxes ... that is, the income of yourself, your wife/husband, and any other family members living in your household, plus money received from other sources, such as, government payments, pensions.

\$1,000-1,999. () ⁵⁵⁻	5,000-5,999. () ⁵	9,000-9,999. () ⁵⁶⁻	13,000-13,999. () ⁵	25,000 & over. () ⁵
2,000-2,999. () ²	6,000-6,999. () ⁵	10,000-10,999. () ²	14,000-14,999. () ⁵	
3,000-3,999. () ³	7,000-7,999. () ⁷	11,000-11,999. () ³	15,000-19,999. () ⁷	
4,000-4,999. () ⁴	8,000-8,999. () ⁵	12,000-12,999. () ⁴	20,000-24,999. () ⁸	

b) Please indicate on the line below your individual income (do not include other family members or income from other sources) for 1974 before deductions _____⁵⁷⁻

34. To which of the following racial groups do you belong. Are you White ()¹, Negro or Black ()², Indian ()³, Japanese ()⁴, Chinese ()⁵, Filipino ()⁶, Hawaiian ()⁷, or other (SPECIFY) _____³ 58-

35. Do you own your own house ()¹, rent a house ()², or rent an apartment ()³? 59-

Now we are interested in finding out about certain characteristics of your job or work experience.

36. Are you self-employed? Yes ()¹ No ()² 60-

37. Are you currently a member of a labor union? Yes ()¹ No ()² 61-

38. How long have you been working at your present job? Under 1 year.....()¹
 1 - 5 years()²
 6 - 10 years.....()³
 11 - 15 years.....()⁴
 16 or more (SPECIFY) _____⁵ 62-

39. What is your job title? _____ 63-

40. a) Are you eligible for a pension when you retire? Yes ()¹ No ()² 64-

b) How long before you are eligible for retirement? Under 5 years.....()¹
 5 - 10 years()²
 11 - 20 years()³
 21 - 30 years()⁴ 65-

APPENDIX A - Continued

8.

41. How many paid sick days are you eligible for each calendar year? 66-
 1 - 5 days.....()1
 6 - 10 days.....()2
 11 - 15 days.....()3
 16 or more SPECIFY _____ 4
42. How many days paid vacation are you eligible for each calendar year? 67-
 1 - 5 days()1
 6 - 10 days.....()2
 11 - 15 days.....()3
 16 or more SPECIFY _____ 4
43. a) Do you have health insurance? Yes ()1 68-
 No ()2 --- SKIP TO Q.44
- b) Does your company pay for part of your policy ()1, all of your policy ()2, 69-
 or none of your policy ()3?
44. Do you consider yourself to be a white collar worker ()1, a blue collar worker ()2 70-
 a manager ()3, a professional ()4, or some other (SPECIFY) _____?5
-
45. In which of the following industry groups does your job belong: 71-
 Service()1
 Manufacturing()2
 Wholesale & Retail()3
 Contract Construction.....()4
 Transportation, Communication, Electric, Gas or Sanitary..()5
 Government()6
 Finance, Insurance & Real Estate.....()7
 Agriculture, Forestry or Fisheries.....()8
 Mining()9
 Other (SPECIFY) _____ 0
-
46. a) On the average how many hours per week do you work? 72-
 1 - 10 hours.....()1
 11 - 20 hours.....()2
 21 - 30 hours.....()3
 31 - 40 hours.....()4
 41 - 50 hours.....()5
 50 OR MORE (SPECIFY) _____ 6
- b) How much of this is over-time? 73-
 None.....()1
 1 - 5 hours.....()2
 6 - 10 hours....()3
 11 - 15 hours... ()4
 16 OR MORE (SPECIFY) _____ 5
47. Do you work a daytime shift ()1, an afternoon/evening shift ()2, or a night 74-
 shift ()3?

Thank you for participating in this survey. Please return the questionnaire in the 75-
 self-addressed, stamped envelope provided.

NAME _____ 76-

ADDRESS _____ 77-

CITY _____ STATE _____ ZIP _____ 78-

APPENDIX B

COVER LETTER

Benton & Bowles, Inc. 909 Third Avenue, New York, N.Y. 10022

Dear Homemaker:

I trust that all is well with you and that you are having an enjoyable summer.

Attached you will find a survey of great importance to all of us. This survey is designed to be filled out by the head of your household, that is, the person who is considered the major source of income. If, in fact, you are considered the major source of income we know that you will fill out the questionnaire and return it quickly. If it is not you, but some other member of your household we feel confident that you will encourage him or her to fill out the survey and that you will see to it that it is returned quickly to us.

Please make note of the fact that the questionnaire contains questions on both sides of each page. Please read each question carefully before recording an answer. We think that you will find this an interesting survey to participate in.

Remember, as usual your responses will be held in the strictest confidence.

Thanking you in advance for your cooperation, I remain

APPENDIX C
FOLLOW-UP POST CARD

Dear Homemaker:

About 3 weeks ago I sent you a questionnaire designed to be filled out by the person in your household who is considered to be the primary source of income. In checking my records I see that I have not yet received your response. If by chance, our correspondence is crossing in the mails, please ignore this reminder and accept my thanks. If you have not yet completed the survey, please take the time to do so now and send it to me.

Thanking you in advance, I remain

APPENDIX D

LIST OF RELIABILITIES AND VALIDITIES
OF QUESTIONNAIRE ITEMS

- Q 1. Life Satisfaction Scale
Converse and Robinson (1973) found a correlation (Kendall's tau) of .59 between reported satisfaction at one time and satisfaction reported in an interview four to six months earlier.
- Q 2. Happiness Scale
Bradburn and Caplovitz reported a test-retest over an 8 month period which had a value of Kendall's tau equal to .43. Less than two percent of the respondents chose the opposite extremes (i.e., "not too happy" at time 1, to "very happy" at time 2) across the time interval.
- Wilson (1960) reports two studies with test-retest correlations; one with a value of .70 (a one month interval) and the other with a value of .67 (a two year interval).
- Q 3. Over-all Job Satisfaction Scale
This item was taken from The Survey Research Center of the University of Michigan (1973) - no data on reliability or validity is indicated.
- Q 4. Job Description Index - Work
Reliability - Corrected split - half interval consistency coefficients are reported to exceed .80 for these scales.
- Hulin (1966) reports some evidence of stability over time.
- Validity - Hulin (1966) reports a correlation of -.27 between satisfaction and turnover (over a 12 month period) for female clerical employees.
- Q 5. Middleton's Alienation Scale
Reliability - with the cultural item excluded, a coefficient of reproducibility of .90 was attained. No test-retest data are reported.
- Validity - no data on validity are reported.
- Q 6. Job Description Index - Pay
See Q 4 above.
- Q 7. Perception of Health Item
No data on reliability or validity is indicated.

APPENDIX D - Continued

- Q 8. Job Related Tension Scale
Split - half reliability of .82 was reported by the Survey Research Center of the University of Michigan (1970).
- Q 20. Job Description Index - Co-workers
See Q 4.
- Q's 21
-24 Patchen's Stress Scale
No data on reliability or validity is indicated.
- Q 25. Rosenberg's Self-Esteem Scale
A Guttman coefficient of reproducibility of this scale was .92 and its scalability was 72 percent for Rosenberg's sample of 5,024 respondents.
- Validity - Several attempts were made to assure validity. Firstly, fifty young adult "normal volunteers" employed by the National Institute of Mental Health filled out the Self-Esteem Scale and were independently rated by ward nurses on Leary Scales. A significant association was obtained between self-esteem scores and depression (as judged by the nurses). Secondly, in the larger survey (N=5,024), a significant correlation appeared between self-esteem and depressive affect (measured by another self-administered scale). Thirdly, a significant correlation was obtained between self-esteem and a number of psychosomatic symptoms. Finally, there was significant association between self-esteem and choice of class leader in a sociometric study involving 272 high school seniors. The first three relationships were negative, the last was positive.
- Q 26. Job Description Index - Promotion
See Q 4.
- Q 27. Marital Stress
These items were taken from Bradburn and Caplovitz (1965) - no data on reliability and validity was indicated.
- Q 28 Drinking Habits Item
No data on reliability and validity is indicated.

BIBLIOGRAPHY

- Agassi, Judith B. The Quality of Women's Working Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Aiken, Michael and Hage, Jerald. "Organizational Alienation: A Comparative Analysis," American Sociological Review (August 1966): 497 - 507.
- Alderfer, C. P. Existence, Relatedness, Growth: Human Needs in Organizational Settings. New York: The Free Press, 1972.
- Anderson, Nels. Work and Leisure. New York: The Free Press of Glencoe, Inc., 1961.
- Argyris, C. Integrating the Individual and the Organization. New York: John Wiley & Sons, 1964.
- Bartolomé, Fernando. "Executives as Human Beings," Harvard Business Review (November - December 1972): 62 - 69.
- Berglind, Hans. Working Conditions, Employment and Labor Market Policy. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Blalock, H. M., Jr. "Making Causal Inferences for Unmeasured Variables from Correlations among Indicators," American Journal of Sociology 69 (1963): 53 - 62.
- Blauner, Robert. Alienation and Freedom. Chicago: University of Chicago Press, 1964.
- Bradburn, Norman M. The Structure of Psychological Well Being. Chicago: Aldine Publishing Company, 1969.
- Braude, Lee. Work and Workers. New York: Praeger Publisher, Inc., 1975.
- Brayfield, A. H. and Crockett, W. H. "Employee Attitudes and Employee Performance," Psychological Bulletin 52 (1955): 396 - 424.
- Brayfield, A. H. and Wells, R. V. "Interrelationships Among Measures of Job Satisfaction and General Satisfaction," Journal of Applied Psychology 41 (1975): 201 - 205.
- Brennan, Niall. The Making of a Moron. New York: Sheed and Word, 1953.

BIBLIOGRAPHY - Continued

- Burke, R. J. and Joyner, R. C. Some Significant Contexts and Components of Individual Quality of Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Cabat, Richard, C. What Men Live By. New York: Houghton Mifflin Company, 1914.
- Caplan, Robert D.; Cobb, Sidney; and French, John R. P., Jr. "Relationships of Cessation of Smoking with Job Stress, Personality, and Social Support," Journal of Applied Psychology 60 (1975): 211 - 219.
- Cherns, Albert B. and Davis, Louis E. Assessment of the State of the Art. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- _____. Goals for Enhancing the Quality of Working Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Clark, Alfred W. The Client-Practitioner Relationship as an Intersystem Engagement. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Clark, Peter A. Intervention Theory: Matching Role, Focus, and Context. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Davis, Keith. Human Behavior at Work. 5th ed. New York: McGraw - Hill, 1977.
- _____. Organizational Behavior: A Book of Readings. 4th ed. New York: McGraw -Hill, 1974.
- Davis, Louis E. and Taylor, James C. Technology Effects on Job, Work, and Organizational Structure: A Contingency View. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Davis, Louis E. and Sussman, Gerald I. Technological Prerequisites for Delegation of Decision Making to Work Groups. Edited by Louis E. Davis and Albert B. Cherns Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.

BIBLIOGRAPHY - Continued

- Dean, D. G. "Alienation: Its Meaning and Measurement," American Sociological Review 26 (October 1961): 753 - 758.
- Delamotte, Yves P. Union Attitudes Toward Quality of Working Life. Edited by Louis B. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Douard, Henry and Reynaud, Jean-Daniel. Union-Management Conflicts over Quality of Working Life Issues. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Dowell, Ben Evans, "The Relationship between the Importance and Satisfaction of Desires in Work, Non-Work, and Life." Ph.D. dissertation, University of Minnesota, 1975.
- Dumazedier, J. and Latouche, N. "Work and Leisure in French Sociology," Industrial Relations (February 1962).
- Dyer, James S. and Hoffenberg, Marvin. Evaluating the Quality of Working Life - Some Reflections on Production and Cost and a Method for Problem Definition. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Faunce, William A. and Dubin, Robert. Individual Investment in Working and Living. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Faxen, Karl-O and Hansson, Reine. Research on Self-Developing Forms of Organization. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Friedlander, Frank. "Importance of Work versus Nonwork Among Socially and Occupationally Stratified Groups," Journal of Applied Psychology 50 (1966): 437 - 441.
- Gardell, Bertil. Compatibility - Incompatibility between Organization and Individual Values: A Swedish Point of View. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Gecham, Arthur S., and Weiner, Yoash. "Job Involvement and Satisfaction as Related to Mental Health and Personal Time Devoted to Work," Journal of Applied Psychology 60 (1975): 521 - 523.

BIBLIOGRAPHY - Continued

- Gillespie, James J. Free Experience in Industry. London: The Pilot Press Ltd., 1948.
- Gillo, Martin W., "Studies on the Nature of the Relationships between Job and Life Satisfaction: Towards a Comprehensive Model." Ph.D. dissertation, University of Kansas, 1973.
- Ginzberg, Eli. Work Structuring and Manpower Realities. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Goldring, Patrick. Multipurpose Man. New York: Taplinger Publishing Co., Inc., 1974.
- Green, Thomas F. Work, Leisure, and the American Schools. New York: Random House, 1968.
- Guion, Robert M. Personnel Testing. New York: McGraw-Hill Book Company, 1965.
- Hackman, J. R. and Lawler III, E. E. "Employee Reactions to Job Characteristics," Journal of Applied Psychology 55 (1971): 259 - 286.
- Heron, Alexander R. Why Men Work. Stanford California: Stanford University Press, 1948.
- Herrick, Neal Q. and Maccoby, Michael. Humanizing Work: A Priority Goal of the 1970's. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Hopp, M. A. Alienation: Some Conceptual and Methodological Considerations. Unpublished manuscript, University of Minnesota, 1974.
- Hulin, C. L. "Effects of Community Characteristics on Measures of Job Satisfaction," Journal of Applied Psychology 50 (1966): 185 - 192.
- _____. "Sources of Variation in Job and Life Satisfaction: The Role of Community Characteristics and Job Related Variables," Journal of Applied Psychology 53 (1969): 279 - 291.
- Hulin, C. L. and Blood, M. J. "Job Enlargement, Individual Differences and Worker Responses," Psychological Bulletin Vol. 69, Number 1 (1968): 41 - 55.
- Hulin, C. L. and Smith, P. C. "Sex Differences in Job Satisfaction," Journal of Applied Psychology 48 (1964): 88 - 92.

BIBLIOGRAPHY - Continued

- Imparato, N. "Relationships between Porter's Need Satisfaction Questionnaire and the Job Description Index," Journal of Applied Psychology 56 (1972) : 397 - 405.
- Iris, B. and Barrett, G.V. "Some Relations between Job and Life Satisfaction and Job Importance," Journal of Applied Psychology 56 (1972) : 301 - 304.
- Kavanagh, Michael and Halpern, Michael. "The Impact of Job Level and Sex Differences on the Relationship between Life and Job Satisfaction," Academy of Management Journal 20 (1977) : 66 - 73.
- Kirsch, Barbara A. and Lengermann, Joseph J. "An Empirical Test of Robert Blauner's Ideas on Alienation in Work As Applied to Different Type Jobs in a White-Collar Setting," Sociology and Social Research Vol. 56 (January 1972) : 180 - 194.
- Kornhauser, Arthur. Mental Health of the Industrial Worker. New York: John Wiley & Sons, 1965.
- Lawler III, Edward E. Measuring the Psychological Quality of Working Life: The Why and How of It. Edited by Louis E. Davis and Albert B. Chernes. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- _____. Motivation in Work Organizations. Monterey, California: Brooks/Cole Publishing Company, 1973.
- _____. Pay and Organizational Effectiveness: A Psychological View. New York: McGraw-Hill, 1971.
- Lawler III, Edward E. and Porter, Lyman W. "The Effect of Performance and Job Satisfaction," Industrial Relations 7 (October 1967) : 20 - 28.
- Levenstein, Aaron. "Technological Change, Work, and Human Values," Social Science Vol. 42, Number 2 (April 1967): 67 - 79.
- _____. Why People Work. New York: The Crowell-Collier Press, 1962.
- _____. "Work Incentives in the Age of Automation," American Journal of Orthopsychiatry Vol. 38, Number 5 (October 1968) ; 893 - 899.
- Levinson, Harry. The Exceptional Executive. Cambridge, Massachusetts: Harvard University Press, 1968.

BIBLIOGRAPHY - Continued

- Lifter, Mark Louis. "Relationship of Job Content Characteristics to Organizational Satisfaction and Life Satisfaction." Ph.D. dissertation, Wayne State University, 1973.
- Locke, E. A. The Nature and Causes of Job Satisfaction. Edited by M. D. Dunnette. Handbook of Industrial and Organizational Psychology. Chicago: Rand-McNally, 1976.
- _____. "What is Job Satisfaction," Organizational Behavior and Human Performance 4, (1969): 309 - 336.
- Lystad, Mary Hanemann. "Social Alienation: A Review of Current Literature," The Sociological Quarterly 13 (Winter 1972): 90 -113.
- McDonald, Blair W. and Gunderson, E. K. Eric. "Correlates of Job Satisfaction in Naval Environments," Journal of Applied Psychology 59 (1974): 371 - 373.
- McDonough, John J. The Quality of Working Life: Challenge to Continuity. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Mangione, Thomas W. and Quinn, Robert P. "Job Satisfaction, Counterproductive Behavior and Drug Use at Work," Journal of Applied Psychology 60 (1975): 114 -116.
- Mansfield, R. "Need Satisfaction and Need Importance In and Out of Work," Studies in Personnel Psychology 4 (1972): 21 - 27.
- Meissner, Martin. "The Long Arm of the Job: A Study of Work and Leisure," Industrial Relations (1971): 253 - 258.
- Meidner, Rudolf. The Obligations of Industry and Society in the Swedish Labor Market of the Future. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Middleton, Russell. "Alienation, Race, And Education," American Sociological Review (December 1963): 973 - 977.
- Mobley, W. H. and Locke, E. A. "The Relationship of Value Importance to Satisfaction," Organizational Behavior and Human Performance 5 (1970): 463 - 483.
- Neal, Arthur G. and Seeman, Melvin. "Organizations and Powerlessness: A Test of the Mediation Hypothesis," American Sociological Review 29 (April 1964): 216 - 226.

BIBLIOGRAPHY - Continued

- Neff, Walter S. Work and Human Behavior. New York: Atherton Press, 1968.
- Mire, Joseph. Trade Unions and Worker Participation in Management. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Nie, Norman H.; Hull, C. Hadlai; Jenkins, Jean G.; Steinbrenner, Karin; and Bent, Dale H. Statistical Package for the Social Sciences. New York: McGraw-Hill, 1975.
- Parker, Stanley. The Future of Work and Leisure. New York: Praeger Publishers, 1971.
- Pearlin, Leonard I. "Alienation From Work: A Study of Nursing Personnel," American Sociological Review (June 1962): 314 - 326.
- Piore, Michael J. Job Monotony, Employment Security, and Upward Mobility in the Labor Market Structure. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Porter, L. W. "A Study of Perceived Need Satisfaction in Bottom and Middle Management Jobs," Journal of Applied Psychology 45 (1961): 1 - 10.
- Quinn, R. P. and Kabin, R. L. "Organizational Psychology," Annual Review of Psychology 18 (1967): 437 - 466.
- Quinn, Robert P. and Shepard, Linda J. The 1972-73 Quality of Employment Survey. Ann Arbor, Michigan: Survey Research Center of the Institute for Social Research, The University of Michigan, 1974.
- Quinn, R. P.; Staines, G. L.; and McCullough, M. R. "Job Satisfaction: Is There a Trend?" Manpower Research Monograph No. 30, U. S. Department of Labor: 1974.
- Reitz, H. Joseph. Behavior in Organizations. Homewood, Illinois: Richard D. Irwin, Inc., 1977.
- Ronan, W. W. and Organt, G. J. "Determinants of Pay and Pay Satisfaction," Personnel Psychology 26 (1973): 503 - 520.
- Schaw, Louis C. The Bonds of Work. San Francisco: Jossey-Bass, Inc., Publishers, 1968.

BIBLIOGRAPHY - Continued

- Schesta, John Frank. "Leisure: Compensation for Job Dissatisfaction." Ph.D. dissertation, University of Missouri - Columbia, 1975.
- Seashore, Stanley E. and Taber, Thomas D. Defining and Measuring the Quality of Working Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Seeman, M. "On the Meaning of Alienation," American Sociological Review (December 1959) : 783 - 791.
- _____. "On the Personal Consequences of Alienation in Work," American Sociological Review Vol. 32 (April 1967): 273 - 285.
- Shepard, Jon M. "Alienation as a Process: Work as a Case in Point," The Sociological Quarterly 13 (Spring 1972): 161 - 173.
- Sheppard, Harold L. Some Indicators of Quality of Working Life: A Simplified Approach to Measurement. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Sheppard, Harold L. and Herrick, Neal. Where Have All the Robots Gone? New York: The Free Press, 1972.
- Smith, P. C. The Development of a Method of Measuring Job Satisfaction. Edited by E. A. Fleishman. Studies in Personnel and Industrial Psychology. Washington, D.C.: Dorsey Press, 1967.
- Smith, Patricia; Kendal, L.M.: and Hulin, C. L. The Measurement of Satisfaction in Work and Retirement, A Strategy for the Study of Attitudes. Chicago: Rand McNally, 1969.
- Sodano, Valerie L. and Wahba, Mahmoud A. "Quality of Organizational Life: Organizational Structure, Climate and Alienation," Unpublished Paper, 1974.
- Stokols, D. "Toward a Psychological Theory of Alienation," Psychological Review 82 (1975) : 26 - 44.
- Takezawa, Shin-ichi. Changing Worker's Values and Implications of Policy in Japan. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.

BIBLIOGRAPHY - Continued

- Thorsrud, Einar. Collaborative Action Research to Enhance The Quality of Working Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Tosi, Henry L. Reading in Management: Contingencies, Structure, and Process. Chicago: St. Clair Press, 1976.
- Trist, Eric. Planning the First Steps Toward Quality of Working Life in a Developing Country. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Udy, Jr., Stanley H. Work in Traditional and Modern Society. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.
- Wahba, Mahmoud A. "Alienation in Work and Society," Unpublished paper, 1975.
- Walton, Richard E. Criteria for Quality of Working Life. Edited by Louis E. Davis and Albert B. Cherns. Vol. 1: The Quality of Working Life. New York: The Free Press, 1975.
- Wells, H. G. The Work, Wealth and Happiness of Mankind. 2 Vols. New York: Greenwood Press, Publishers, 1968.
- Wexley, Kenneth N. and Yukl, Gary A. Organizational Behavior and Industrial Psychology. New York: Oxford University Press, 1975.
- Winter, Robert Arthur. "Relationships between Job Satisfaction and Leisure Satisfaction." Ph.D. dissertation, State University of New York at Buffalo, 1973.