ABSTRACT

SOCIAL PSYCHOLOGICAL DETERMINANTS OF JOB SATISFACTION
AMONG SOCIAL SCIENCE FACULTY
AT TWO MID-WESTERN UNIVERSITIES

by

Edward Howard Borck

The purpose of this research was to examine job satisfaction and leaving among social science college faculty. An exchange theory paradigm of rewards and investments was chosen as the appropriate theoretical conceptualization as it provided an opportunity to better understand those conditions which can lead to either satisfaction or dissatisfaction. Satisfaction was measured as a general response and in terms of the lack of discrepancy between desired and perceived work aspects.

Data was collected at two Mid-western universities by means of a questionnaire. The two research sites were similar except that university Y was more advanced in professionalism than university X. Differences existing between the colleges on professionalism were significant enough to merit the use of a wider theoretical perspective. The relationship between exchange category and dependent measures was viewed in terms of the particular normative circumstances at each organization.

At the more professional university, high reward-high investment personnel reported highest satisfaction, while at university X, high reward-low investment staff depicted highest satisfaction on most measures. Low reward-low investment respondents expressed lowest satisfaction at both universities and low reward-high investment staff were not present during the survey, indicating that these workers had left their jobs. Leaving was found to be a consequence of both exchange specifications and extent of professionalism. At university Y, leaving was considered a necessary part of professional mobility; as a result, most respondents expressed some desire to leave, regardless of reward-investment category. At the more local university, X, low reward-low investment staff reported significantly higher levels of leaving.

Implications of this research for theories of satisfaction were discussed.

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CHAPTER I

INTRODUCTION

The major objective of this study is to understand the problem of job satisfaction for the faculty member. Work or job activity can affect a person's general pattern of life and the extent to which one is satisfied with his job influences his general life satisfaction. Also, since occupational roles pattern a great deal of our social interaction and are a source of personal identity, people expect to derive meaning from their occupation.[1] When work expectations are not fulfilled, dissatisfaction and varying degrees of neurosis can result. Kornhauser,[2] for example, argues that job feelings are crucial intervening processes between a man's work and his level of mental health. Satisfaction with the job is associated with better mental health, dissatisfaction with poorer mental health. Since a person's work can either lead to fulfillment or personal strife, the study of job satisfaction is of humanistic concern and importance. Perhaps by pointing to those conditions which lead

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[1]Ronald M. Pavalko, Sociology of Occupations and Professions (Itasca, Illinois, Peacock Publishers, Inc., 1971), p. 3.

[2]Arthur Kornhauser, Mental Health of the Industrial Worker, A Detroit Study (New York, Wiley and Sons, 1965), p. 79.

to satisfaction and dissatisfaction, organizational decision makers may implement policy to foster humanistic goals.

The present study could focus on any one of a large number of occupations but we have selected the college faculty member as our subject. While faculty members do not reflect a large category of employment, the institutional surroundings of the university constitute an important reason for studying faculty as a type of worker. Today, challenges to the traditional goals of the university exist from both faculty and students. There exists, for example, a demand for relevance and the facing of social and humanistic issues by the university. It is argued that the university has defined its objectives in too narrow a conception of the scholarly, scientific method.[3]

As a result of these kinds of challenges to the university, the faculty member finds himself in an organization undergoing changes in goals and objectives. Within this changing organization, the faculty member attempts to fulfill his own personal needs and goals. Since the faculty member's satisfaction may be contingent on the organizational climate, in particular the system of rewards and

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[3]Edward H. Levi, "The University and the Modern Condition," 170 (December 1970), p. 1.

punishments, the study of the work role of faculty may point to the direction in which our educational institutions are heading.

The professional work role itself is of curious character and little has been done in terms of understanding the similarities or differences between professional and non-professional work satisfaction. Professions are usually characterized by high prestige, power, moderate to high income, and a degree of autonomy.[4] Such job attributes are highly desirable to the average person and the professional is therefore assumed to be both satisfied and fulfilled at his work. It is also argued that the professional voluntarily includes working aspects in his leisure time to the degree that it is difficult to say when he is not working.[5]

As a result of this assumed professional fulfillment, job satisfaction studies have generally included only non-professional occupations. But the assumptions of professional satisfaction need to be explored. These assumptions are based primarily on the professional work per se, not the situational context in which the work is immersed.

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[4]Edward Gross, "The Worker in Society," in Henry Borow (ed.), _Man in a World at Work_ (Boston, Houghton-Mifflin, Co., 1964), p. 68.

[5]Pavalko, _op_. _cit_., p. 179.

Eckert and Stecklein[6] note the importance of this distinction between the professional career and the job situation. They argue that college teachers' disappointments or frustrations derive chiefly from the circumstances under which they work, not from the nature of the job itself. When the situational environment of the professional is studied, a conflict sometimes appears between the needs of the worker and his bureaucratic setting.[7] But the situational context needs to be explored beyond its bureaucratic properties. Instead of limiting our inquiry to professional-bureaucratic conflict, we will study the realm of satisfaction for the professional which includes bureaucratic as well as other situational working aspects.

Studies on professional satisfaction have also been limited by measuring satisfaction in a limited and unsophisticated way. Usually a general response is used to measure a person's level of job satisfaction but Wilensky argues that this type of measurement ignores some of the most significant aspects of work such as the occupational

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[6]Ruth Eckert and John Stecklein, "Job Motivations and Satisfactions of College Teachers, A Study of Faculty Members in Minnesota Colleges," Cooperative Research Monograph No. 7 (Washington, U.S. Department of Health, Education and Welfare, 1961), p. 83.

[7]See for example Robert K. Merton, Social Theory and Social Structure (Illinois, Free Press, 1957), pp. 207-222, and Pavalko, op. cit., pp. 188-192.

environment, community, self-identity, and the worker's interpersonal relations.[8]

Past Research

A vast amount of research has been conducted on job satisfaction. Locke reports that since 1930, approximately 4000 articles have been published on the subject.[9] But despite a great deal of interest in the area of job satisfaction, the understanding of the phenomenon has not advanced at a pace commensurate with research efforts. One possible reason for this lack of progress is the neglect by scholars to provide a theoretical basis for understanding satisfaction. Studies on job satisfaction have substituted a policy of "correlation without explanation" for an adequate understanding.[10] Instead of identifying independent, "causal" factors, past research has generally only distinguished between important and not so important aspects of work which lead to satisfaction.

This research can contribute to an understanding of career choice and mobility by conceptualizing and measuring

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[8]Harold Wilensky, "Varieties of Work Experience," in Henry Borow (ed.), Man in a World at Work (Boston, Houghton-Mifflin, Co., 1964), p. 135.

[9]Edwin Locke, What is Job Satisfaction (Washington, D.C., Final Report, American Institute for Research, Nov., 1968), p. 1.

[10]Edwin Locke, op. cit., pp. 2-6.

those factors which lead to job satisfaction and especially to dissatisfaction. Insight can also be furnished into the problems of how the organization motivates its member to stay and fulfill the duties of his office.[11] Finally, this study may contribute to the literature aimed at explaining motivation to role performance by delineating the organizational climate in terms of those facets of a professional role which provide rewards and punishment.

The present study seeks to establish exchange categories of reward and investment which lead to differing degrees of motivation which in turn affect a worker's satisfaction level and desire to leave his job.[12] Although theorists suggest the possibility of explaining satisfaction in terms of exchange theory, little has been accomplished in this direction. In terms of exchange theory, we are concerned with what a worker "gives" in a situation, and what he "receives back." What the person gives are his investments and what he receives back are rewards. Investments are general kinds of attributes persons have which are viewed as valuable or potentially

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[11]Chester Barnard stresses these problems in The Functions of the Executive (Massachusetts, Harvard University Press, 1945), chapters 2 and 11.

[12]Our initial theoretical stance differs from this utilization of rewards and investments. A brief description of the intellectual development of our problem is in Appendix A.

valuable by others. Rewards are systemic qualities issued for appropriate behavior. Investments lead to expectation for reward, and the higher one's investments, the higher is one's expectation for reward. Atkinson[13] presents a similar argument by predicting motivation and satisfaction from both expectation level and rewards. In general, our theory predicts that when investments and rewards are not commensurate, especially when the outcome is worse than expected, dissatisfaction and leaving will occur.

Our view of satisfaction is based on psychological need theory and we measure satisfaction as a general set of items and as three distinct types of need discrepancies. Discrepancy is used here to denote the difference existing between the importance of a specific aspect or attribute of one's job and the amount of that attribute or aspect which the person perceives to be present in the job. The greater the discrepancy between importance of the aspect and perception of aspect, the greater the dissatisfaction. Based on research which distinguishes between types of work needs, we arrive at three discrepancy measures of satisfaction: environmental, self-fulfillment, and interpersonal.[14]

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[13] John Atkinson, An Introduction to Motivation (New Jersey, Van Nostrand Co., 1964) chapter 10.

[14] Edwin Locke, *op. cit.*, pp. 13-19.

In summary, we propose to show how propositions from exchange theory relate to need fulfillment theories with an attempt at integration. This theoretical design should enable a better understanding of job satisfaction and leaving, and the selection of faculty members as respondents will provide some important research on professional satisfaction.

Outline of Dissertation

In Chapter II there is a discussion of theory and hypotheses.

In Chapter III there is an outline of the research design and methodological problems are discussed.

In Chapter IV the analysis is presented.

Chapter V presents a summary and discussion of the dissertation.

CHAPTER II

THEORY AND HYPOTHESES

In this chapter we will discuss two main theoretical approaches to the problem of job satisfaction: need theory and exchange theory. We hope to integrate these theories into a schema which will enable us to better understand the kinds of conditions which lead to satisfaction and dissatisfaction for the faculty member.

Need Theory

Reviewing the literature on job satisfaction we find that most of the studies center on blue collar work and use need theory as the major approach to the problem. Researchers study the kinds of work aspects which satisfy the needs of the worker. Satisfaction is viewed as a positive valence force which occurs if the needs of the worker are being fulfilled.[1] It is assumed that a satisfied worker is also a highly motivated person. Because of this connection between satisfaction and motivation, studies identifying elements which lead to satisfaction

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[1] Victor Vroom, *Work and Motivation* (New York, John Wiley and Sons, 1964), p. 17.

are deemed important.[2] This importance rests on the idea that a motivated and satisfied worker will choose positively oriented behavior and an organization wants its members to fulfill their duties.

Basic to this type of need theory is the relationship existing between the person and his environment. Marx viewed the work environment as alien to man. Labor, to Marx, is coerced, external to the person (as compared to an extension of the worker), and not voluntary (the person has to work to live). Since the person is under conditions of forced labor, the work is not satisfying a self need but merely a means to satisfy needs external to the person. Marx finds the roots of alienation in the estrangement of man from his work. Labor becomes an object, existing outside the person, as something external and alien.[3]

Theorists have distinguished between two sets of needs for man. Maslow argues that there are higher order and lower order needs.[4] The higher order needs center on self actualization, while lower order needs are physiological

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[2]Victor Vroom, op. cit., p. 9.

[3]For a summary of Marxist theory for the worker see Robert Freedman (ed.), Marxist Social Thought (New York, Harcourt, Brace and World Inc., 1968), pp. 69-78.

[4]Abraham Maslow, Eupsychian Management A Journal (Illinois, Irwin and Dorsey Press, 1965), pp. 44-45.

in nature. Herzberg's theory depicts these two kinds of needs as intrinsic and extrinsic needs.[5] Intrinsic needs are related to a person's psychological growth and development and include job aspects such as the nature of the task, creativity, and responsibility. Extrinsic needs are related to the hedonist theory of direction toward pleasure and avoidance of pain and include job aspects such as company policy, working conditions, salary, and interpersonal relationships.[6] Herzberg further argues that only the intrinsic or content factors can influence satisfaction, while extrinsic or contextual aspects influence dissatisfaction.[7] Later research and discussion shows little evidence for such a dual-dimensional argument. Instead, a uni-dimensional theory of satisfaction and dissatisfaction is most appropriate with intrinsic elements of the job being more important in predicting both satisfaction and dissatisfaction than extrinsic aspects.[8]

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[5]Frederick Herzberg, et al., Job Attitudes: Review of Research and Opinion (Pittsburgh, Psychological Service, 1957), pp. 37-81.

[6]Victor Vroom, op. cit., p. 9.

[7]For a comprehensive summary of the Herzberg controversy see George Labovitz, et al., "The Herzberg Controversy: A Critical Reappraisal," Academy of Management Journal (March, 1968), pp. 99-108.

[8]Ewen, et al., "An Empirical Test of the Herzberg Two-Factor Theory," Journal of Applied Psychology, 50 (December, 1966), pp. 544-50.

So far in this chapter we have identified two types of worker needs: intrinsic, which we will call self-fulfillment needs, and extrinsic, which will be referred to as environmental needs.[9] In our study of faculty, we expect self-fulfillment needs to be most important because central to the notion of self-fulfillment is control and influence with one's job, and these attributes appear to be crucial for the professional. Scott[10] and Vroom,[11] for example, argue that professionals desire a high degree of autonomy from organizational control and need to be free from confining regulations. Faculty express control and involvement in terms of being able to make decisions concerning the way their department is run and the way the system defines distribution of rewards and incentives. The literature clearly indicates that decision making is one of the key variables in determining satisfaction for

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[9]These labels are more appropriate and more generally used than either Herzberg's distinction between intrinsic-extrinsic or Maslow's higher-lower order needs.

[10]Richard Scott in Amitai Etzioni (ed.), _The Semi Professions and Their Organization_ (New York, Free Press, 1969), p. 89.

[11]Victor Vroom, _op. cit._, pp. 114-115.

the professional.[12] Dykes[13] and Kornhauser,[14] for example, argue that a crucial determinant of faculty satisfaction is the relationship the worker perceives between his ideal conception of what his role in decision making should be and how he presently perceives his role.

Environmental factors have also been shown to influence satisfaction levels.[15] In this research, such factors include the physical features of the job such as research and teaching facilities, caliber of students, community effects, and secretarial help. Although Herzberg[16] combines interpersonal and environmental aspects, interpersonal factors constitute a unique measure of satisfaction. Social psychologists have long argued that interpersonal factors

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[12]The discussion on decision making centers on the concept of participation. Motivational theorists argue that in order to have optimal motivation, the worker must feel he is a part of the decision making process. See for example Rensis Likert, New Patterns of Management (New York, McGraw-Hill Co., 1961), Victor Vroom, loc. cit., and Harvey Hornstein, et al., "Influence and Satisfaction in Organizations: A Replication," Sociology of Education, (Fall, 1968), pp. 380-389.

[13]Archie Dykes, "Faculty Participation in Academic Decision Making," American Council on Education (Washington, D.C., 1968), pp. 10-11.

[14]William Kornhauser, Scientists in Industry, Conflict and Accommodation (Berkeley, California, University of California Press, 1962)

[15]George Labovitz, et al., loc. cit.

[16]Frederick Herzberg, et al., loc. cit.

exert a separate type of influence on persons.[17] Danielson,[18] for example, reports that professionals emphasize satisfaction derived from contact with colleagues and superiors. Interpersonal factors in this study include relationships with chairman and colleagues.

Most studies on job satisfaction have stopped at this point of identifying types of work factors and associating these aspects with a unitary conception of satisfaction.[19] But arguments have been made for the further specification of satisfaction as a complex variable. Since workers can view different aspects of their jobs as satisfying or dissatisfying, it is difficult to choose which one of these aspects represents the true measure of satisfaction.[20] As a consequence, job satisfaction studies report divergent findings on what aspects lead to satisfaction and dissatisfaction. It seems we are faced with the fundamental question of what is satisfaction?

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[17]See for example Theodore Newcomb in Otto Klineberg, et al., Perspectives in Social Psychology (New York, Holt, Rinehart, and Winston Inc., 1965), pp. 38-52.

[18]Lee Danielson, Characteristics of Engineers and Scientists Significant for Their Utilization and Motivation (University of Michigan, Bureau of Industrial Relations, 1960), p. 38.

[19]See Victor Vroom, loc. cit., and Bonnie Carroll, "Job Satisfaction a Review of the Literature," N.Y.S. School of Industrial and Labor Relations, Cornell University, Key Issues Series #3 (February, 1969).

[20]Victor Vroom, op. cit., p. 101.

The most theoretically promising definition of satisfaction is the lack of discrepancy between factors desired and perceived. This definition allows us to view satisfaction as a type of motivational need. We can then measure satisfaction not only in terms of a general set of responses but also as three distinct types of needs: self-fulfillment, environmental, and interpersonal. Many of the previous studies were theoretically limited due to the procedure of associating types of job aspects with a general measure of satisfaction. Dykes,[21] for example, predicts levels of satisfaction from disparities between idealized and perceived roles. He finds that satisfied workers have little discrepancy between the kind of decision making role they would like to play and how they perceive their present decision making opportunities. As a result, if a faculty member's decision making need is fulfilled, he is likely to be satisfied at his job. But Dykes is only associating one measure of satisfaction (fulfillment in terms of decision making) with another (general satisfaction). The operation is redundant because fulfillment in terms of making decisions is a satisfaction. We avoid this kind of circular association by viewing both discrepancies on work factors and general satisfaction as dependent measures of satisfaction.

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[21] Archie Dykes, loc. cit.

We have defined the lack of difference between a person's desired and perceived factors as a measure of satisfaction. Satisfaction can then be viewed as two main factors: 1) the strength of a person's desire for some positive factor in the work situation, and 2) the degree to which the desired factor is perceived to be present. The discrepancy between these two factors is a direct measure of job dissatisfaction. The more the discrepancy, the more dissatisfied the worker. Katzell[22] argues that discrepancies will produce different levels of satisfaction according to the values of the particular aspect under consideration by the person. This argument raises the question of whether to treat satisfaction in a fixed needs fashion or consider how important each aspect is to the individual. In other words, we can assume that needs are fixed for all persons (e.g., self-fulfillment factors are most important for all workers) or we can ascertain the importance of each work factor for each individual.

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[22] R. Katzell, in H. Borow (ed.), Man in a World at Work (Boston, Massachusetts, Houghton Mifflin Co., 1964), pp. 341-363.

Many of the critiques of job satisfaction argue that workers are not seen as individuals.[23] Instead, the worker is assigned a fixed set of needs which may or may not apply to him. Contrary to this fixed needs schema, we view each person as having a distinct set of needs which may or may not be in agreement with the needs of other persons. These needs are ranked in terms of importance and salience and motivate the person's behavior. Other persons may have different needs and may also rank them differently. Thus, in this study, the discrepancies between desired and perceived work aspects are determined on an individual level. We first ask the worker which factors are important to him, and then we ascertain if he perceives those factors in his work environment.

This distinction between what a person desires and what he perceives in his occupation is relevant to role theory. Role theorists have distinguished between the personal or subjective role and the perceived role.[24] The personal role definition refers to the person's wishes

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[23] See for example Edwin Locke, loc. cit., Nancy Morse, "Satisfaction in the Work Job," Survey Research Center (University of Michigan, 1953), and William Faunce, "Job Satisfaction and the Meaning of Work," U.S. Department of Labor Conference (unpublished paper, 1968).

[24] Daniel Levinson, "Role, Personality, and Social Structure in the Organizational Setting," in Neil Smelser, et al., (eds.), Personality and Social Systems, second edition (New York, John Wiley and Sons Inc., 1970), pp. 471-484.

for a desired behavior associated with his social status, while a perceived role refers to how a person views the expected behavior connected with his social status. The discrepancy between the personal and perceived roles can be viewed as a type of role conflict which leads to dissatisfaction and/or leaving the organization. Kahn[25] refers to this type of role situation as person-role conflict.

So far we have distinguished between four measures of satisfaction: self-fulfillment, environmental, interpersonal discrepancies, and a general measure of satisfaction. We arrive at discrepancy indices by viewing the difference between how important a work aspect is and how the person perceives that aspect in his job. We are not concerned with finding out whether the worker's perceptions are objectively true or not. Job satisfaction is an attitude, and attitudes are subjective in nature. If the discrepancy is real for the worker, the consequences of such a discrepancy are also real.[26]

Even when our dependent variables have been adequately measured, we must inquire into the conditions which lead to

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[25] Robert Kahn, et al., Organizational Stress (New York, Harcourt, Brace and World Inc., 1964), pp. 6-15.

[26] W. I. Thomas makes this point when he suggests that "if men define situations as real, they are real in their consequences." Quoted in Nicholas Timasheff, Sociological Theory Its Nature and Growth (New York, Random House, third edition, 1967), p. 153.

variations in our dependent measures. One of the major critiques of job satisfaction studies centers on the lack of theory.[27] Although researchers have suggested that exchange theory might provide a theoretical base for understanding satisfaction, little has been accomplished in this direction. We propose to use exchange theory as an explanatory schema to understand satisfaction. By viewing satisfaction as our dependent variable, and depicting the relationship between rewards and investments as our independent factor, we hope to arrive at a better understanding of the problem of faculty satisfaction.

Exchange Theory

Exchange theory has been traditionally viewed as an interpersonal process whereby people invest certain things of value with the expectation that they will receive something commensurate in return. Ekeh[28] argues that this exchange process is functional to group integration. Theorists link the exchange situation in terms of classical economics. A person has certain "costs" and "profits" in a given interchange. It is to the person's advantage to maximize his profits. These types of considerations are

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[27]See for example Edwin Locke, *loc. cit.*, and William Faunce, *loc. cit.*

[28]Peter Ekeh, "Issues in Exchange Theory," *Berkeley Journal of Sociology* (California, Vol. XIII, 1968), pp. 42-56.

taken into account in Homan's theory of distributive justice.[29] For justice to be realized, the profit of each man should be directly proportional to his investments. Thus, justice is achieved if in comparison with others, a person's profit-investment ratio is proportional.

Satisfaction, as viewed from exchange theory, is basically determined by how much a man expects from an interchange and how much that man gets from that exchange. Satisfaction is then contingent on both strength of expectancy and the amount of incentive or reward. Atkinson[30] argues that expectancy directs our attention to the associative link between performance of a particular task and attainment of rewards. Expectancy, then, is a key consideration in determining satisfaction. We are more concerned with expectation levels rather than wishes or desires. It seems that a person's expectations are formed more on legitimate, realistic criteria compared to ideals or fantasies.[31] As a consequence, expectation for reward is more relevant for the worker than his job desires or

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[29] George Homans, Social Behavior: Its Elementary Forms (New York, Harcourt, Brace and World Inc., 1961), pp. 68-69, 232-274.

[30] John Atkinson, An Introduction to Motivation (New Jersey, Van Nostrand Co., 1964), chapter 10.

[31] John Atkinson, Motives in Fantasy Action and Society (New Jersey, Van Nostrand Co., 1958), pp. 288-305.

wishes. A person may wish for many things he actually does not expect. If his wishes are not fulfilled, he is more likely to accept this outcome than if his expectations are not met.

We have argued that the relationship between expectancy and reward leads to various degrees of satisfaction. There remains the important question of how to measure expectancy. To ascertain expectations we should find the antecedents of the expectancy that a particular behavior will lead to a certain degree of reward. The antecedent of expectancy is a person's investments. Persons expect differences in rewards to correspond to differences in investments. The more a person has invested in a situation (with such things as age, skills, etc.,) the more he expects in terms of rewards. In other words, it is viewed as fair that there should be a correlation between the inputs a person gives to his work and the amount of reward received by the person. Furthermore, experience has taught us that such a fair exchange may not exist. Satisfaction then depends just as much on whether expectations are fulfilled as on the actual quantity of rewards. Pepitone[32] makes a similar point when he notes that there are determinants for reward other than

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[32] Albert Pepitone in Robert Abelson, et al., Theories of Cognitive Consistency: A Sourcebook (Chicago, Illinois, Rand McNally Co., 1968), pp. 324-326.

sheer quantity of labor. These other determinants are investments such as training, sacrifice, and education.

An example may simplify why a balance between rewards and investments leads to satisfaction. Suppose we view two faculty members. P_1 receives \$9500.00 as a salary, while P_2 receives \$11,000.00. One might argue that P_2 is more satisfied since he is receiving the greater reward. Upon examination of the investments of both men, we find P_1 does not have a Ph.D. nor has he published any articles or books; P_2, on the other hand, has a Ph.D. and has published extensively. Since P_2 has invested more in the situation, his expectations for reward are higher than the expectations of P_1. While P_1 may be quite content with \$9500.00, since that is all he expects, P_2 expects more than \$11,000.00 due to his high investments. P_1 is therefore more satisfied than P_2 even though P_2 has greater rewards.

Our treatment of satisfaction differs from distributive justice formulations in two major ways: 1) we do not consider the concept of "cost," and 2) we are not incorporating comparisons with others. The main reason for not considering "cost" is that the variable is not really needed to determine satisfaction. Homans, for example, argues that "costs" have little to do with satisfaction.[33] Circumstances of cost may require a person to remain in a social situation

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[33]George Homans, loc. cit.

that he regards as unsatisfactory. While his costs may be low and his rewards high, it would be incorrect to infer that his satisfaction is also great. Another reason for excluding "cost" is to simplify the conceptual scheme.[34] Thus, since the concept of "cost" is not essential in determining satisfaction, and it would be confusing to introduce the concept into our theory, we have not incorporated the variable in our schema for satisfaction.

We have also eliminated considering the person's relative situation in terms of significant others. Some equity theorists include direct comparisons with others in order to determine "just" situations. Patchen,[35] for example, argues that a person makes a cognitive relation of his own situation and background compared to others' situations and background factors. Homans[36] also argues that distributive justice is realized when features of investments and profits can be put into rank order in comparison with those of other men, and these features fall in the same place in all the different rank orders of men. Along with these conceptions

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[34]See for example simplified schemas of Stacy Adams, in Leonard Berkowitz, Advances in Experimental Social Psychology, Vol. 2 (New York, Academic Press, 1965) chapter 7, and Hans Zetterberg in Joseph Berger, et al., Sociological Theories in Progress (Massachusetts, Houghton Mifflin Co., 1966), pp. 139-140.

[35]Martin Patchen in Herbert Hyman, et al., Readings in Reference Group Theory and Research (New York, Free Press, 1968), p. 169.

[36]George Homans, loc. cit.

of justice and satisfaction, Wieck[37] contends that inequity exists for a person whenever he perceives that the ratio of his outcomes to inputs and the ratio of another's outcomes and inputs are unequal.

A different conception of reference group is also evident in the literature. Instead of viewing the situations of others in comparison with one's own circumstance, people refer to how norms define their present situation. Sampson[38] conceives of reference groups in this normative sense. He argues that equity circumstances are influenced by the social norms in the particular kind of situation under study. Alexander and Simpson[39] make a similar point by suspecting that situations are normatively defined in various ways to reduce or eliminate inequities. Reference groups are then the source of norms and values rather than standards of direct comparison.[40] In this research we will

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[37]Karl Wieck, "The Concept of Equity in the Perception of Pay," Administrative Science Quarterly (December 1966, Vol. II), pp. 414-439.

[38]Edward Sampson in Leonard Berkowitz (ed.), Advances in Experimental Social Psychology (New York, Academic Press, Vol. IV, 1969), p. 262.

[39]Norman Alexander and Richard Simpson, "Balance Theory and Distributive Justice," Sociological Inquiry (Spring, 1964, Vol. 34, No. 2), p. 190.

[40]Harold Kelley discusses these two functions of reference groups in Herbert Hyman, op. cit., p. 169, see also William Gamson in Leonard Berkowitz, op. cit., Vol. 1, pp. 81-110 and Alvin Gouldner, "The Norm of Reciprocity: A Preliminary Statement," American Sociological Review (Vol. 25, 1960), pp. 161-178.

consider reference groups in terms of normative influences. We wish to understand how others define situations of reward-investment and how these normative influences affect the worker.

This discussion of reference groups brings us to the question of how are ideas of justice or fairness formed in a person's mind. In other words, a person has certain expectations for reward which are a consequence of his investments. But what outside factor influences a person's sense of fairness? We have already hinted at the answer to this question by referring to reference groups as normative influences. A person's sense of fairness develops as a function of expectations learned from prior experience and/or stems from normative conditions which define what outcomes to expect as "one's due." A person then evaluates the outcomes of a given relationship in terms of what he feels he deserves. Past experience and normative circumstances usually define justice in terms of requiring commensurate reward for appropriate effort or commitment but various kinds of normative prescriptions may exist in a particular work situation.[41]

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[41]Sampson makes an interesting distinction between equity and equality in justice. He suggests that equity refers to some fair but differential state while equality refers to a sort of socialist norm which defines everyone in the same situation in order to be fair. This research deals with equity states, where norms define justice in terms of differential reward-investment states, Edward Sampson, op. cit., pp. 259-264.

To talk in terms of investments and rewards seems to lend itself to the employment situation in which persons readily think in terms of inputs and outcomes. But despite the seeming easy adaptation of exchange theory to job circumstances, we still face problems of defining investments and rewards.[42] The definition of investment is a particularly difficult problem. Blau, for example, argues that the loose term investment has included all kinds of background characteristics which have nothing to do with justice.[43] He then suggests that to avoid confusion an investment must constitute time and effort on the part of the person. This consideration would eliminate sex as an investment because being of a particular sex does not represent time or effort. Another difficulty with defining investments and rewards is that an attribute could at one time be defined as an investment, and at another time, as a reward. An example of this is the variable of status. Higher status is earned as a reward but it is also an investment and commitment leading to higher expectation for reward. It does not clarify matters to suggest that inputs and outputs are to be understood as a person

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[42] Edward Sampson, op. cit., pp. 260-261.

[43] Peter Blau, "Justice in Social Exchange," Sociological Inquiry (Spring, 1964, Vol. 34, No. 2), p. 195.

defines them. Alexander and Simpson[44] argue that this only confuses issues because people disagree about the nature of a characteristic as an investment and about how a particular investment should count in terms of distribution of rewards.

One way of overcoming this difficulty of defining investments is to specify the conditions under which an attribute is to be considered an investment. Zetterberg[45] suggests that an investment must imply that a person has invested his ego in activities that are important and relevant to him. But these activities should also be viewed as valuable by others because this will lead us to logically assume that these investments should lead to expectations for reward. In agreement with this specification of investments, we include the following factors as investments in this study: degree obtained, articles and books published, research grants obtained, age, and length of time at the university.

Rewards are less difficult to define. Rewards are positive sanctions or attributes given to a person for performing a particular activity. In this study rewards include salary, rank, respect from colleagues, faculty benefits, and a light teaching load. "Rank" could be

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[44]Norman Alexander and Richard Simpson, loc. cit.

[45]Hans Zetterberg, loc. cit.

treated as either a reward or investment, depending on your point of view. Our argument is that rank is given for positively evaluated behavior, and that associated with rank is differential treatment which is a special occupational reward. In regard to teaching load, most faculty view a "light" teaching load as a positive attribute. By having a light teaching responsibility, faculty are more able to devote themselves to the courses they are assigned and to allocate a larger proportion of their time to research and/or outside interests.

Relationship Between Rewards and Investments

Zetterberg[46] suggests that the relation between rewards and investments may be viewed in four combinations:[47] 1) high reward-high investment, which leads to a neutral reaction, 2) high reward-low investment, which results in a positive effect, 3) low reward-high investment, which leads to a negative reaction, and 4) low reward-low investment, which results in a neutral circumstance. Zetterberg admits that the reactions he predicts from these four conditions are unclear and unverified. This thesis attempts to better understand such circumstances of reward-investment and specify the outcomes of such

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[46]Hans Zetterberg, *loc. cit.*

[47]Actually, Zetterberg's categories are reward-commitment conditions but our definition of investment is similar to his usage of commitment.

conditions for the faculty worker.

Each of the four conditions represents either a balanced or imbalanced state. Balance or consonance occurs when elements imply each other and "fit together."[48] The greater the discrepancy between rewards and investments, the greater the imbalance. This imbalance is reasonable to assume since investments lead to expectation for reward, and if these expectations are not commensurate with received rewards, the situation is not equitable. The effect of an imbalanced reward-investment situation on the person is dissonance. Bramel,[49] for example, states that dissonance is aroused when a person encounters information which disconfirms an expectation. This unpleasant emotional state is the result of contraexpected information regardless of whether that information has implications of desirable or undesirable aspects. Since we can only infer dissonance and cannot really measure the variable, the question remains as to the specific consequences of these states of balance or imbalance.[50]

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[48] Leon Festinger, in Jack Brehm and Arthur Cohen, _Explorations in Cognitive Dissonance_ (New York, John Wiley and Son, 1962), pp. 3-10.

[49] Dana Bramel in Robert Abelson, _et al._, _op. cit._, pp. 355-372.

[50] Festinger posits that dissonance is a drive state characterized by tension. We can only verify such a state by viewing consequences of tension and imbalance, Leon Festinger as reviewed by Brehm and Cohen, _loc. cit._

Jaques[51] argues that dissatisfaction and leaving are a function of the difference between the amount of reward that a person believes he should receive and the amount of reward which he does receive. Whenever a person's rewards deviate from his expectation level, regardless of the direction of the disparity, that person experiences imbalance and some form of tension.[52] These considerations lead us to believe that workers whose rewards are commensurate with their investments should express greater satisfaction than persons whose rewards are disproportional to investments.[53] The underlying principle for such balance predictions is the notion of justice; an exchange situation is "fair" or "just" when rewards are proportional to investments.

In comparison with the above predictions from consistency theory, we can discuss hypotheses from expectancy or motivation theory. Atkinson[54] views satisfaction as a result of expectancy and incentive and highest satisfaction

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[51]Eliot Jaques, as reviewed by Victor Vroom, _Work and Motivation_ (New York, Wiley and Sons, 1964), p. 168.

[52]Such imbalance may be a consequence of the worker making a wrong assessment of his situation or his accurate perception of an "unfair" work circumstance.

[53]Victor Vroom, _op. cit._, p. 169.

[54]John Atkinson, _An Introduction to Motivation_ (New Jersey, Van Nostrand Co., 1964) chapter 10.

comes from conditions of high reward and medium expectation. In this circumstance the person is confident but not certain of achieving his reward and will try hardest at his task. If the person's expectations are high, then the person is almost sure he will receive the reward, and the situation can become boring. Finally, if a person's expectations are low and he receives a high reward, a somewhat negative effect will prevail because the surprise of receiving such an unexpected result will produce doubt or uneasiness. In terms of this series of predictions from motivation theory, pleasure or satisfaction is maximal when there is a moderate discrepancy, with the reward received being somewhat greater than that expected.

An alternative motivation hypothesis is that the amount of satisfaction in achieving a high reward decreases as the expectation for that reward becomes more favorable. If a person expects little but receives a great deal, his unexpected good fortune leads to high satisfaction. But as a person expects a great deal, the achievement of high reward is not as satisfying. This hypothesis leads us to the conclusion that conditions of high reward and low investment (where expectations are low) would produce maximal satisfaction. With this background in consistency and motivation theories, we will now turn to specific predictions of satisfaction and leaving for each of our investment-reward circumstances.

High Reward-High Investment (HR-HI)

Conditions of HR-HI represent persons with high expectation for reward and high received rewards. Motivational theory might predict medium to low levels of satisfaction from such circumstances because if the person is almost sure he will receive a high reward, the achievement of such a goal may be boring. Zetterberg also predicts neutral or medium satisfaction. But other theorists find that high commitment and reward factors lead to high satisfaction.[55] White,[56] for example, argues that optimal working conditions are depicted by challenge, risk taking, and commitment; also important is positive response from the environment. Professionals, in particular, have been shown to need working specifications of high investment and reward.[57] HR-HI incidence represents these optimal working factors because the person has invested highly in his job and is being highly rewarded. Thus, we predict that HR-HI faculty

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[55]See for example Rensis Likert, *loc. cit.*, and Victor Vroom, *loc. cit.*

[56]Robert White, "Motivation Reconsidered: The Concept of Competence," *Psychological Review* (Vol. 66, No. 5, 1959), pp. 297-333.

[57]See for example Donald Pelz and Frank Andrews, *Scientists in Organizations* (New York, John Wiley and Sons Inc., 1967), Walter Hirsch, *Scientists in American Society* (New York, Random House, 1968), and Theodore Caplow and Reece McGee, *The Academic Marketplace* (New York, Anchor paperbacks, 1965).

will express highest satisfaction (as measured by our four indices)[58] and lowest level of leaving.[59] Previous research has not specifically tested equitable occurrences so our research steps into a new direction at this point.

Hypothesis 1 a) Faculty under HR-HI conditions will express most satisfaction.

b) Faculty under HR-HI conditions will express lowest tendency to leave.

High Reward-Low Investment (HR-LI)

Conditions of HR-LI are imbalanced and inequitable. A person's expectations for reward are low due to poor investments but he is receiving high rewards. Researchers report divergent findings under such specifications of overpayment. Adams and his associates[60] report that dissonance is an outcome of overpayment, and this dissonance

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[58]We do not expect differences between our measures of satisfaction except that we predict self-fulfillment discrepancy to be our most sensitive measure.

[59]Although we have been concerned with satisfaction, leaving is an important consequence of dissatisfaction. March and Simon, for example, argue that the greater the individual's satisfaction with the job, the less his desirability of movement, in James March and Herbert A. Simon, Organizations (New York, John Wiley and Sons, 1958), p. 94.

[60]Stacy Adams in Leonard Berkowitz, op. cit., Vol. 2, Chapter 7, and Stacy Adams and William Rosenbaum, "The Relationship of Worker Productivity to Cognitive Dissonance About Wage Inequities," Journal of Applied Psychology (Vol. 46, 1962), pp. 161-164.

leads to a tension state which the worker attempts to eliminate. Homans[61] also maintains that overpayment results in a negative emotional state which can be characterized as guilt. Other findings depict no significant differences between overpayment and equitable events.[62] In contrast to predictions of low satisfaction for over-rewarded persons, motivational hypotheses suggest that greatest satisfaction occurs when expectations for reward are low and the person receives high rewards, so long as the discrepancy is not so striking as to arouse feelings of guilt or anxiety. The rationale is that the person is pleasantly surprised by his good fortune. This type of argument advocates that the amount of satisfaction increases as the expectation for reward decreases.[63]

Other arguments concerning over-reward incidents state that the particular normative conditions affect the definition and interpretation of what constitutes "justice." Thus, norms govern how a person reacts to conditions of

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[61] George Homans, *loc. cit.*

[62] See A. Friedman and P. Goodman, "Wage Inequity and Productivity: A Replication," (Mimeographed paper, *Graduate School of Business*, University of Chicago), and Edward Lawler, "Effects of Hourly Overpayment on Productivity and Work Quality," *Journal of Personality and Social Psychology* (Vol. 10, 1968).

[63] John Atkinson, *loc. cit.*

overpayment. Anderson and Shelly,[64] for example, conduct an experiment where university students are overpaid in a laboratory situation. These students define their situation as "just" since they perceive that the money is provided by the government and "they can afford it."

It seems that most of the theories concerning overpayment conditions are either without empirical verification or with research conducted in the small group laboratory. The assertion that small group experimentation does not pertain to "real life" events has been made before[65] and it is not our intention to discuss this point extensively here, but we do wish to point out that while overpayment might be easily induced under controlled instances, such specifications would be more involved in an actual work setting. Considering the degree to which faculty members are overpaid, it is not likely that any surplus rewards will produce a negative emotional state. To produce a negative evaluation, any additional increment would have to be great enough so that the person could not conceive of it as legitimate.

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[64]Bo Anderson and Robert Shelly, "Reactions to Inequity II: A Replication of the Adams Experiment and a Theoretical Reformulation," Michigan State University Technical Report (November 1969).

[65]Joseph McGrath and Irwin Altman discuss the relevancy of laboratory studies to real life in Small Group Research, A Synthesis and Critique of the Field (New York, Holt, Rinehart, and Winston, 1966), pp. 70-72.

Not only are any negative effects of overreward unlikely for HR-LI staff, but these exchange conditions should lead to satisfaction. The highly rewarded person who has low investments can escape dissonance by reasoning that he must possess other types of qualities that are not easily identified. This kind of reasoning can lead to a satisfactory self-image. We therefore view HR-LI incidences as generally favorable for the faculty member, but not as favorable as HR-HI factors. The reason for this second rank in terms of satisfaction is due to the nature of having low investments. Since the academic profession defines prestige primarily in terms of qualifications, particularly scholarly productivity, the low investment person may consider his situation somewhat limiting. Also, because of the low investments, there may be a threat of loss of reward in the future.

Hypothesis 2 a) Faculty under HR-LI conditions will express less satisfaction than HR-HI persons, but more satisfaction than LR-HI or LR-LI respondents.

b) Faculty under HR-LI circumstances will express higher scores on leaving than HR-HI staff, but lower scores on leaving than LR-HI or LR-LI respondents.

Low Reward-High Investment (LR-HI)

Although our propositions concerning LR-HI staff are not subject to test because of an inadequate sample, we predict that such respondents are least satisfied and most likely to leave their job. These people have high expectation for reward but are receiving low rewards. Homans maintains that such people are angry,[66] and if this is true, we might expect them to leave the organization. Job relocation is especially likely since mobility would not be a problem for such faculty due to their high investments (degrees and/or publications). Such persons would have gained high visibility and high desirability as the result of their investments, especially their publications.[67] Since LR-HI staff are not likely to be present during the survey due to high levels of leaving, we will analyze this category with the realization that only a small number of such respondents will be available.

Hypothesis 3 a) Faculty under LR-HI circumstances will express least satisfaction.

b) Faculty under LR-HI conditions will express highest desire to leave.

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[66]George Homans, op. cit., pp. 75-77.

[67]See the excellent discussion on the effects of visibility in James March and Herbert Simons, op. cit., p. 104.

Low Reward-Low Investment (LR-LI)

LR-LI factors represent equitable specifications because the person expects low rewards due to his low investments, and he is receiving low rewards. Research has not specifically dealt with the consequences of such instances but usually a neutral response is predicted.[68] We view such circumstances as unsatisfactory. This is particularly true for professionals who need a work environment of high challenge and response. The LR-LI person also has difficulty in achieving an acceptable self-image because he is making a low investment in a high investment situation and his low self-image is verified by the low rewards he receives. In addition, this person's chances for escape are limited due to a lack of necessary qualifications. Even though LR-LI occurrences could be considered "just," we predict that workers will express low satisfaction and a high score on leaving.

Hypothesis 4 a) Faculty under conditions of LR-LI will express least satisfaction (compared to HR-HI or HR-LI staff).

b) Faculty under conditions of LR-LI will express highest scores on leaving (compared to HR-HI or HR-LI staff).

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[68] Hans Zetterberg, loc. cit.

Summary of Hypotheses

We have stated eight hypotheses[69] which predict various levels of satisfaction and leaving according to specific reward-investment instances. HR-HI staff are predicted to express highest satisfaction and lowest scores on leaving. Conditions of high reward and investment represent involvement and positive response from one's work. HR-LI respondents will also express generally high satisfaction and low levels of leaving. These people are highly rewarded and may accept this evaluation of self (as suggested by receiving high rewards). We doubt whether significant levels of over-rewards exist for faculty, so we don't expect such respondents to express guilt or dissatisfaction with their situation.[70] On the other hand, there are some negative consequences of having low investments even though one is highly rewarded. Some of these faculty may feel somewhat uneasy about not living up to the image of being a scholar (which consists of publishing and being involved with research). This factor

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[69]Our hypotheses are rank order in nature because our data does not justify any attempt to predict absolute levels.

[70]Satiation could theoretically occur whereby a person receives more than he expects or wishes. We are not concerned with satiation in this study because we do not predict that rewards will significantly exceed a faculty member's expectations. It might also be important to note that the rewards depicted in this research are positively viewed by most faculty; problems of a low-valued incentive should therefore not be a concern.

plus the generally undesirable situation of having low investments would not produce satisfaction levels equal to those of HR-HI staff. We do not expect to find many respondents under LR-HI specifications due to the negative aspects of such a situation, but those faculty present during our survey should express dissatisfaction and a high desire to leave. Finally, we predict that LR-LI respondents will also express low satisfaction and high scores on leaving. LR-LI factors reflect low commitment with little opportunity to achieve high rewards.

CHAPTER III

METHODOLOGY

Nath[1] suggests that one of the crucial concerns for comparative researchers is the selection of social units. In this study we chose two universities undergoing changes from teaching to research emphasis. We felt that these changing conditions could be particularly important in a study of job satisfaction because when an organization changes, the personnel in that system may be faced with new role expectations.[2] In such situations the changes may be of such a nature that those who found the old system rewarding would not be rewarded in the new organizational climate. As a result, dissatisfaction and possibly a desire to leave the setting could occur.

The main reason for choosing two universities was to test the reliability of our questionnaire and add verification to our findings. Both universities are located in

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[1]Raghu Nath, "A Methodological Review of Cross Cultural Management Research," _International Social Science Journal_ (Vol. 20, January, 1968), pp. 35-62.

[2]For a discussion of this kind of role conflict see Daniel Levinson, _loc. cit._, and Norman Cameron notes that rigidity and conflict _may_ result if a person is faced with new role expectations, in "Role Conflict and Behavioral Pathology," _American Journal of Sociology_ (Vol. 55, 1950), pp. 464-467.

the same geographical area, have the same kind of academic traditions, and the students attending the two universities are similar.[3] Also, both colleges appeared to be undergoing changes toward professional, research activities.

Although we expected two similar universities, an unanticipated difference emerged between the two schools. One of the colleges, which we will refer to as Y, was more advanced in professionalism. By professionalism we refer to factors such as research facilities, and number of faculty who have advanced degrees and/or have published. Tables I-IX represent evidence for this distinction in professionalism between the organizations. Table I, for example, shows that 30% of faculty at university X perceive their department as having a reward structure favoring teaching rather than research activities, while only 04% of the staff at university Y perceive this emphasis of reward for teaching. Table II illustrates that 60% of the respondents at university X perceive their departments as undergoing changes from teaching to research activities, while only 32% of the respondents at university Y perceive such changes. Tables III-IX cite comparisons on research funds and facilities, degrees obtained, articles and books published, and number of research grants obtained, especially grants over $1000.00. From these nine

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[3]Comparisons on room and board rates, average appropriations per student, faculty salaries, date founded, and degree emphasis are also similar. The data is not reported to insure anonymity to the universities.

TABLE I

Perceptions of Teaching-Research Emphasis at Universities X and Y

	University X per cent	University Y per cent
1. Rewards and incentives are exclusively on research	05	03
2. Rewards and incentives for research are stressed over teaching	29	39
3. Rewards and incentives are equal for research and teaching	25	51
4. Rewards and incentives for teaching are stressed over research	14	04
5. Rewards and incentives are mainly on teaching	16	00
6. Other	11	03
7. Totals	100 (N=56)	100 (N=76)

TABLE II

Department Presently or Recently Changing from Teaching Orientation to Professional Activities

	University X per cent	University Y per cent
1. Strongly agree	03	07
2. Agree	34	07
3. Agree but with reservation	29	17
4. Disagree	27	51
5. Strongly disagree	07	17
6. Other	00	01
7. Totals	100 (N=56)	100 (N=76)

TABLE III

Funds Are Available For Research

	University X per cent	University Y per cent
1. Strongly agree	02	04
2. Agree	11	18
3. Agree but with reservations	27	40
4. Disagree	43	22
5. Strongly disagree	16	15
6. Other	01	01
7. Totals	100 (N=56)	100 (N=76)

TABLE IV

University Affords Adequate Research Facilities

	University X per cent	University Y per cent
1. Strongly agree	00	04
2. Agree	05	25
3. Agree but with reservations	16	37
4. Disagree	48	24
5. Strongly disagree	29	10
6. Other	02	00
7. Totals	100 (N=56)	100 (N=76)

TABLE V

Highest Degree Obtained

		University X per cent	University Y per cent
1.	B.A. or B.S.	07	01
2.	M.A.	28	04
3.	All but thesis	20	12
4.	Ph.D.	45	83
5.	Totals	100 (N=56)	100 (N=76)

TABLE VI

Number of Articles Published in Journals in the Last Five Years

		University X per cent	University Y per cent
1.	0	54	16
2.	1-2	23	40
3.	3-5	16	29
4.	6-10	02	12
5.	11 or more	05	03
6.	Totals	100 (N=56)	100 (N=76)

TABLE VII

Number of Books Written or Edited
in the Last Ten Years

		University X per cent	University Y per cent
1.	0	79	68
2.	1-2	19	22
3.	3 or more	02	10
4.	Totals	100 (N=56)	100 (N=76)

TABLE VIII

Research Grants Obtained
in the Last Five Years

		University X per cent	University Y per cent
1.	0	63	41
2.	1-2	32	45
3.	3 or more	05	14
4.	Totals	100 (N=56)	100 (N=76)

TABLE IX

Number of Research Grants Over $1000.00

		University X per cent	University Y per cent
1.	0	79	54
2.	1	14	15
3.	2	07	31
4.	Totals	100 (N=56)	100 (N=76)

tables the reader can see that university Y has greater percentages of research attributes than university X, thus indicating a greater degree of professionalism.

Because of this unexpected difference on professionalism, we have unintentionally incorporated environmental variation into our research design. Fortunately, environmental differences may increase the theoretical merit of this study by allowing us to view the organizational member as influenced by the type of normative system to which he belongs.[4] In terms of our theory, we can compare how reward-investment categories determine satisfaction and leaving at two different systems. We will be interested in what effect professionalism has on the relationship between our independent and dependent measures.

Instrument

A questionnaire was used in this study to provide anonymity and decrease the time factor for respondents.[5] Since we are dealing with a possibly delicate area of job dissatisfaction, a respondent may feel uneasy and hesitant about expressing his views. If a person is dissatisfied

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[4]For a discussion of environmental variation see Garlie Forehand, _et. al._, in L. L. Cummings, _et. al._, _Readings in Organizational Behavior and Human Performance_ (Illinois, Irwin and Dorsey Press, 1969), p. 3.

[5]A complete copy of the questionnaire and follow-up letter to respondents are found in Appendices B and C.

with his job, he might not want this information circulated. Hochstim and Athanasopoulos[6] argue that researchers can obtain as good or better responses in sensitive areas from mail questionnaires. Questionnaires, even with identification numbers, can provide the necessary anonymity needed by some faculty. The second reason for choosing a questionnaire was related to the busy schedules of most respondents. During pre-tests, faculty expressed positive sentiment toward filling out a questionnaire rather than consenting to a lengthy interview. With a questionnaire, the subject can select a time when he is not busy.

Pre-tests of the instrument were conducted at a third university. At that time thirty respondents were asked to complete the instrument with this researcher present. The questionnaire was then discussed with each subject. After completion of revisions in the instrument, actual data collection began at two midwestern universities. At least three-fourths of the respondents were personally visited in regard to the study. The remaining subjects received a note explaining the purpose of this research and requesting the return of the questionnaire. Faculty were encouraged

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[6]Joseph R. Hochstim and Demetrios A. Athanasopoulos, "Personal Follow-up in a Mail Survey: Its Contributions and Its Cost," Public Opinion Quarterly (Vol. XXXIV, No. 1, Spring, 1970), pp. 69-81. For other benefits of using a questionnaire see Claire Selltiz, et al., Research Methods in Social Relations (New York, Holt, Rinehart, and Winston, 1959), p. 240.

to add written comments, and space was provided for such reactions at the end of each section of the instrument. No names appeared on the questionnaire and confidentiality was assured to all respondents. An identification number for each instrument made possible follow-ups to contact non-response subjects.

Population

The population consists of all teaching, social science faculty at two midwestern universities. Departments represented include Anthropology, Economics, Geography, Political Science, Psychology, and Sociology. We chose social scientists because we wished to maximize conditions of change. The social sciences appear to be presently undergoing changes toward professionalism, and these changes might result in conflicting work circumstances for faculty who prefer the older, teaching emphasis given to their discipline. Tables X-XII describe the respondents at each university by rank, age, and sex.

The principal difference between our two populations is the larger percentage of younger, lower status faculty at university X. This finding is understandable when we consider that since university X is less advanced in professionalism than university Y, university X may be less able to recruit highly qualified faculty. As a result, positions at university X are likely to be filled by younger

TABLE X

Respondents by Rank

Rank	University X per cent	University Y per cent
Professor Emeritus	07	05
Professor	12	28
Associate Professor	11	30
Assistant Professor	29	33
Instructor	41	04
Totals	100 (N=56)	100 (N=76)

TABLE XI

Respondents by Sex

	University X per cent	University Y per cent
Males	84	93
Females	16	07
Totals	100 (N=56)	100 (N=76)

TABLE XII

Respondents by Age

Age	University X per cent	University Y per cent
Under 30	45	15
31-35	12	17
36-40	09	30
41-45	14	16
46-50	05	09
51-55	07	04
56-60	04	03
over 60	04	06
Totals	100 (N=56)	100 (N=76)

faculty with less training and publications. Table XIII shows the distribution of faculty in terms of reward-investment category. It is interesting to note that if we compare high investment with low investment staff, we find 48% high investment faculty at university Y compared to 39% of high investment faculty at university X. This difference is in the expected direction as more qualified faculty are hired at university Y.

TABLE XIII

Number of Respondents in Each Category of Reward-Investment

Category of Reward-Investment	University X per cent	University Y per cent
High Reward High Investment	34 (n=19)	45 (n=34)
High Reward Low Investment	16 (n=09)	18 (n=14)
Low Reward High Investment	05 (n=03)	03 (n=02)
Low Reward Low Investment	45 (n=25)	34 (n=26)
Totals	100 (n=56)	100 (n=76)

Return Rate

Including non-usuable returns, the percentage of returned questionnaires at university X is 80%, and at university Y, 82%. Table XIV depicts the return rate by departments at the universities. Departmental response appears representative. Two weeks after the questionnaires were left with each member of the sample, a follow-up letter was sent urging each non-respondent to complete and return the questionnaire.[7]

Approximately one-fifth of the respondents at each college did not return the questionnaire. Even though our response rates are considered high,[8] we should be reasonably sure that the non-respondents do not appreciably differ from the respondents in any way that will affect theoretical interpretation. After failure to respond to our follow-up letter, approximately three-fourths of the non-respondents were contacted by a personal visit to their faculty office. Half of these faculty indicated that they would send back the questionnaire as soon as possible.[9] The remaining non-respondents usually remarked that they

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[7]See a copy of the letter in the Appendix.

[8]A good questionnaire return rate is 60%; our returns were approximately 80%. See C. A. Moser, Survey Methods in Social Investigation (London, Heinemann Publications, 1958), p. 127.

[9]There was no consistent difference between regular returns and those stimulated by a personal visit.

TABLE XIV

Return Rate by University and Department

Department	N	University X per cent	N	University Y per cent
A	22	70 (n=15)	22	86 (n=19)
B	12	59 (n=07)	21	76 (n=16)
C	13	70 (n=09)	22	77 (n=17)
D	10	70 (n=07)	14	50 (n=07)
E	21	86 (n=18)	12	82 (n=10)
F	No department		07	100 (n=07)
Non-usable returns		08 (n=06)		04 (n=04)
Totals	78	80 (n=62)	98	82 (n=80)

were too busy or could not be bothered answering questionnaires. These reasons given for not returning the instrument do not appear consistently related to the variables of concern in the present study in such a way as to bias the findings.[10] Thus, considering the nature of reasons for non-response, and the sufficient distribution on important variables in our theory, it is unlikely that the non-respondents seriously distort our findings.

Measurement of Variables

Rewards and Investments are our two main independent variables.[11] A reward score was determined from the following questionnaire items: 51, respect from colleagues, 80, rank, 85, salary, 87, faculty benefits, and 89, light teaching load. Numbers were assigned to each of these variables on a 1 to n basis, n determined by the number of categories of response per item. Summing scores on these reward items, there was a range from 09-31 at university X and from 14-30 at university Y. A median point was established for rewards at each university and respondents were categorized as either low or high reward, depending on whether their score was above or below the median point. The median point for high rewards at university X was 16,

[10] An example of a bias would be if non-respondents represented extreme bases of dissatisfaction.

[11] Inter-correlations for items used to determine our independent measures of rewards and investments are in Appendix D.

and at university Y, 18.

An investment score was determined from the following questionnaire items: 72, age, 73, number of articles published, 74, number of books published or edited, 75, research grants obtained, 76, grants over $1000.00, 79, length of time at university, and 81, degree obtained. Numbers were assigned by the same procedure used for rewards and investment scores ranged from 07-32 at university X, and from 10-29 at university Y. The median point on investments at school X was 18, and it was 21 at school Y. Each respondent was classified as either low or high investment. Thus, since each subject then had a low or high categorization on both rewards and investments, each person was assigned a combination category on these two variables. As a result, all respondents were classified in one of the four reward-investment categories.

Dependent Variables

There are five main dependent variables: self-fulfillment discrepancy, environmental discrepancy, interpersonal discrepancy, general satisfaction, and leaving. Each of the discrepancy types is obtained by taking the difference between how important a job aspect is for a particular respondent and how that person perceives the aspect in his present work surroundings. Each of the discrepancy items has two parts and each section is scored on a 1 to 5 basis. The difference between the sections on a particular aspect is the discrepancy on that item. If, for example, a person checks great importance to a particular item (a score of 5) and then checks that he perceives this item in his job (also a score of 5 if he strongly agrees), then the difference between the desired and perceived sections on this item is 0. Discrepancies only result when a person feels a job aspect is important and disagrees that this aspect is present in his job. If the respondent checks that an item is of little or no importance to him, his discrepancy score on that item is 0, regardless of the degree to which the aspect is perceived in the work environment.[12] Since each discrepancy score is a measure of dissatisfaction, the higher the discrepancy, the more the dissatisfaction.

Job aspects were classified as either self-fulfillment, environmental, or interpersonal discrepancies. The indices for each discrepancy type were summed and divisions were made on median points in terms of high or low discrepancy. Discrepancies for each person is operationally defined as the sum of the remainders when the score for the second item in each of the following pairs is subtracted from the score

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[12]One could argue that spending time on unimportant tasks is costly and therefore negative and should contribute to dissatisfaction, but our schema for understanding satisfaction has been simplified by not considering the effects of costs.

for the first item.[13] Each respondent could then be classified as high or low discrepancy for each discrepancy type. The self-fulfillment items are the following questionnaire measures: 21 and 45,[14] being able to teach preferred courses, 22 and 46, having a voice in determining the direction of the department, 23 and 47, having the opportunity to help select the dean and chairman, 24 and 48, having influence on recruitment of new faculty, and 25 and 49, having the desired emphasis of rewards for research-teaching duties.

Environmental items include 1 and 27, reputation of college, 2 and 28, reputation of department, 3 and 29, adequacy of office space, 4 and 30, adequacy of secretarial help, 6 and 32, university location having agreeable weather, 7 and 33, caliber of undergraduates, 8 and 34, quality of graduate students, 9 and 35, class size, 10 and 36, availability of students for research, 11 and 37, adequate recreational and cultural opportunities, 12 and 38, opportunities for service to and participation in community affairs, 14 and 40, having enough leisure time, 15 and 41,

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[13]This is true only on the condition of the first number being greater than the second since discrepancies only exist when expectation or desire is greater than perceived.

[14]Two questionnaire items reflect the same job aspect. One item indicates the importance of the aspect and the other taps the degree to which the respondent perceives the aspect in his work surroundings.

department supportive of respondent's philosophy of education, 18 and 42, adequate research facilities, 19 and 43, agreeable teaching load, and 20 and 44, funds available for research. Interpersonal discrepancies include 5 and 31, congeniality with colleagues, and 13 and 39, being able to talk openly and effectively with the chairman of one's department.

General Satisfaction and Leaving

A general satisfaction scale was determined from the following questionnaire items: 60, whether the person has fulfilled his job expectations, 61, how happy and satisfied he is with his work, 62, how happy and satisfied he is with his department, 63, the amount of enthusiasm he expresses for his work, 64, the amount of enthusiasm he expresses in terms of his department, 66, the extent of annoying things done in his department, and 67, whether the respondent becomes angry at the way things are done in his department. Scores on these indices were summed and a median point divides respondents into high or low general satisfaction. Leaving questionnaire items include 68, recently considering other job offers, 69 planning to leave the job as soon as an acceptable offer is available, and 70, definitely leaving the job. These leaving items are also summed and a median point at each school differentiates high or low leaving respondents.

A discussion of the statistical techniques utilized in this research will be presented in Chapter IV, where the analysis of the data is also given.

CHAPTER IV

ANALYSIS OF DATA

Our research compares faculty at two universities in terms of faculty satisfaction. Both organizations are similar except that university Y is more advanced in professionalism than university X. This normative difference will be an important factor in explaining some of our findings. Our analysis will focus on the relationship between category of reward-investment and our dependent variables of satisfaction and leaving. We test our hypotheses by examining percentage distributions and reporting significant differences between independent and dependent indices. Statistical significance is determined by nonparametric methods.

Statistical Procedure

It is doubtful that our data meets parametric assumptions.[1] In particular, our questionnaire items are of ordinal scale, that is we can assume that one response category is ranked either higher or lower than the others

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[1]For a discussion of parametric assumptions see S. Siegal, Non-Parametric Statistics (New York, McGraw-Hill Book Company, 1956), pp. 19-34.

in a set, but we cannot assume equal intervals between response items. Thus, for example, an expression of strongly agree is more positive than agree, disagree, or strongly disagree, but the attitudinal distance between a strongly agree and agree response may not be the same as the distance between disagree and strongly disagree.[2]

Not only can we effectively deal with ordinal data by using nonparametric statistics, but we can also handle small populations. Our theory dictates the division of respondents into categories of reward-investment and comparing these groups on dependent dimensions. Since our university populations are 56 and 76, cell distribution of n may be small after categorization. The effectiveness of nonparametric statistics is not affected by such distributions.[3]

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[2]This distinction is important because nonparametric methods describe central tendency in terms of a median point rather than using means and standard deviations as in parametric techniques. When dealing with ordinal data, the median point is not affected by changes of any scores which are above or below it as long as the number of scores above and below remains the same. If we used parametric statistics with ordinal data, any decisions about hypotheses would be doubtful. See Siegal, loc. cit.

[3]S. Siegal, op. cit., pp. 116-127.

One of the most appropriate nonparametric methods for our analysis is Mann Whitney U.[4] When at least ordinal measurement has been achieved, the Mann Whitney U test may be used to determine whether two independent groups have the same distribution on a particular variable. Because we wish to test the differences between our reward-investment groups in terms of satisfaction and leaving, this technique seems ideal for our purposes. Mann Whitney U statistically compares each of our categories with one another in terms of our dependent variables, and tests whether differences between categories result from chance. This method is also one of the most powerful of the non-parametric tests and allows the researcher to reject the null hypothesis (that the distribution on a variable between our categories is the same) at a high level of probability. The alternative hypothesis, that one category is stochastically larger than another (a directional

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[4]Since our data consists of frequencies in discrete categories, the chi square test could also be used. But the problems with chi square are its low power function and cell distribution requirements. The Mann Whitney U is a more powerful test as it allows the researcher to reject the null hypothesis at a higher level of probability. Also, some of the cells in our contingency tables are marginal in terms of cell distribution requirements of chi square which require no fewer than 20% of the cells to have an expected frequency of less than 5. Considering these two nonparametric tests, it seems that with the Mann Whitney U available, the chi square test might be wasteful and even produce doubtful information. See S. Siegal, <u>op</u>. <u>cit</u>., pp. 42-47.

hypothesis) can then be accepted.[5] The probability level set for significance will be .05.

Summary of Hypotheses

It might be helpful to summarize our hypotheses before we examine our findings.

1. High Reward-High Investment - highest in satisfaction and lowest in leaving.

2. High Reward-Low Investment - second highest in satisfaction and second lowest in leaving.

3. Low Reward-Low Investment - lowest in satisfaction and highest on leaving (not considering the special circumstances of LR-HI staff).

4. Low Reward-High Investment - very low satisfaction and high levels of leaving resulting in lack of respondents.

Category of Reward-Investment and General Satisfaction

General satisfaction is the first of our four measures of satisfaction.[6] This index consists of questions on enthusiasm, fulfillment of job expectations, satisfaction with changes in the work situation, and the lack of annoying or hostile factors in one's job. We also distinguish

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[5] S. Siegal, op. cit., pp. 116-127.

[6] We expect the same kinds of findings to hold for all indices of satisfaction but a particular measure may be more or less sensitive depending on the normative circumstances within an organization. As a result, we may find different indices being important at one university and not the other.

between departmental and career satisfaction with this indicator. This departmental distinction is important because a professional may report satisfaction with his work but be dissatisfied with his immediate working situation.[7]

Tables XV and XVI depict the relationship between category of reward-investment and general satisfaction at universities X and Y. Viewing results at university X first, we find 89 percent of the HR-LI subjects expressing high satisfaction compared to 53 percent of the HR-HI persons and 24 percent of the LR-LI respondents. Mann Whitney U analysis in Table XVI shows significant differences on satisfaction between both HR-HI and HR-LI conditions and LR-LI circumstances. Although these findings support our hypotheses, we predicted that HR-HI staff would express highest satisfaction, and instead, find highest satisfaction among HR-LI respondents. This finding is relevant to the theoretical controversy concerning the effect of overpayment.[8] Our data indicates that over-reward does not lead to some tension state, but instead, results in high satisfaction. Perhaps the effects of overpayment depend on how such situations are defined. Most social

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[7]Ruth Eckert, _et al._, _loc_. _cit_.

[8]See for example, Bo Anderson and Robert Shelly, _loc_. _cit_.

TABLE XV

Category of Reward-Investment and General Satisfaction at Universities X and Y

	Category of Reward-Investment					
	University X*			University Y		
General Satisfaction	LR-LI	HR-HI	HR-LI	LR-LI	HR-HI	HR-LI
Low Satisfaction	76%	47	11	59	42	57
High Satisfaction	24	53	89	41	58	43
Totals	100% n=25	100 n=19	100 n=09	100 n=27	100 n=33	100 n=14
		N-53			N=74	

TABLE XVI

Mann Whitney U Analysis of Reward-Investment and General Satisfaction at Universities X and Y

General Satisfaction					
University X			University Y		
High Group	Low Group	Prob. (1 tail)	High Group	Low Group	Prob. (1 tail)
HR-HI	LR-LI	less .01	HR-HI	LR-LI	less .05
HR-LI	LR-LI	less .01			

*Chi square value at University X is 11.766 (n=53, df=2, prob. less than .01 level).

situations are defined by others who establish norms governing behavior. These norms include the definition of what it means to achieve success and satisfaction. When such norms are internalized by people in the system, these standards may serve as a reference point in determining satisfaction.[9] The norms at university X emphasis success and satisfaction in terms of rewards. If a person is receiving high rewards, that person is defined as successful in the organization, regardless of his investment state. Although HR-HI staff at university X are also receiving high rewards, they are located in a local environment which may be lacking in research opportunities. As a result, their high investments are wasted to some degree and they do not express as high a satisfaction as HR-LI staff.

Let us now view findings at the more professional university, Y. We find 58 percent of the HR-HI subjects expressing high satisfaction compared to 43 percent of the HR-LI respondents and 41 percent of the LR-LI staff. Mann Whitney U analysis shows a significant difference between

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[9] We view reference points in terms of normatively regulated patterns rather than as persons in similar or dissimilar status situations. Others, then, are the source of norms and values but not the direct referent point. The norms themselves take on the function of being a comparison point to which a person can refer in order to ascertain his own relative situation.

HR-HI and LR-LI specifications. It seems that norms at this more professional organization emphasize the importance of both rewards and investments. Degrees and publications in such a system may be the key to further rewards, and as a result, the low investment personnel tend to express low satisfaction.

It is interesting to note the relatively low percentage of high satisfaction disclosed at university Y, regardless of reward-investment category. Perhaps our measure of general satisfaction is invalid for some of the respondents. Our measure assumes that a satisfying job is a conflict-free and harmonious experience. But some of the faculty at university Y remarked that being satisfied could lead to complacency, and that an ideal working situation might include some conflict and a great deal of challenge. With this type of attitude existing among some of the staff at university Y, we may be able to understand the lack of sensitivity of our index. While this measure was appropriate at the less professional organization, a more sophisticated index may be needed for cosmopolitan workers.

So far we have discovered that HR-HI staff express high satisfaction at both universities and HR-LI faculty express high satisfaction especially if the organization does not stress the importance of investments. LR-LI persons report low satisfaction at both universities. Even though these respondents receive the amount of reward they expect from their investments, their situation is dissatisfying. This finding disagrees with research which suggests that an exchange situation where one's expectations are met with commensurate rewards will lead to a positive evaluation of the situation.[10] LR-LI occurrences seem to represent a stagnant, unfulfilling situation where chances for escape are limited due to a lack of necessary investments or qualifications.

There is a difference between LR-LI staff in terms of the extent of dissatisfaction. Seventy-six percent of LR-LI faculty at university X express dissatisfaction compared to 59 percent of similar staff at university Y. This difference can be explained by considering that at university X, a faculty member can achieve high rewards without a prerequisite of high investment. Consequently, the low investment person may see more of his colleagues with comparable qualifications receiving high rewards. Since this investment situation is parallel to these people, he may view his situation as unjust. Although LR-LI staff at university Y are also in a dissatisfying circumstance, at least others in the system with corresponding investments

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[10] See for example Hans Zetterberg, *loc. cit.*, Eliot Jaques, *loc. cit.*, Edward Sampson, *loc. cit.*, and Norman Alexander, *et al.*, *loc. cit.*

are receiving low rewards.[11] University Y may also be a more prestigious place to work, thus increasing the liklihood of satisfaction. Finally, there may also be more of an opportunity for LR-LI personnel at university Y to increase their investments due to the better research facilities afforded by a professionally oriented college.

In terms of our measure of general satisfaction, the following summary of findings may be helpful. HR-HI factors are most satisfying at university Y but only moderately satisfying at university X. This distinction may be a function of the relative importance of investments at the universities. At university Y, investments are crucial to advancement and future rewards, but at university X, a person can achieve high reward without investments, and as a result, investments might even be wasteful. We also find over-reward circumstances (HR-LI) highly satisfying at university X but dissatisfying at university Y. This difference may also be a result of how a particular system regards the importance of investments. University X appears to reward personnel regardless of investments and HR-LI staff may feel fortunate to work in such an organization. An alternative explanation for highest satisfaction

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[11]Merton and Kitt make a similar argument when explaining levels of satisfaction in Robert K. Merton and Paul Lazarsfeld, Continuities in Social Research, Studies in the Scope and Method of "The American Soldier" (Glencoe, Illinois, The Free Press, 1950), pp. 42-70.

among overrewarded staff at university X is our neglect to consider the kinds of investments these people may have. Social skills and community service, for example, are but two investments which might be important to people at a local university but which we have neglected to include in our index. HR-LI staff may have high investments if we include the above types of attributes. HR-LI faculty at university Y are faced with the realization that their organization stresses high investments as an integral part of professional achievement. Not only might these people feel they are misfits, but they might also anticipate a possible loss of rewards in the future. Finally, LR-LI staff express low satisfaction at both universities. Although these kinds of factors might be considered fair, people need stimulation and efficacy in their work, and LR-LI specifications depict low commitment and the possible reinforcement of a low self-image by receiving low rewards.

Category of Reward-Investment and Types of Discrepancies

So far we have explored the relationship between rewards-investments and a general measure of satisfaction. But we also measure satisfaction in a more sophisticated way: as the lack of discrepancy between how important a particular need is for an individual worker and how that person perceives the fulfillment of that need in his present job. The literature focuses on three types of motivating needs for the worker: self-fulfillment, interpersonal, and environmental.[12] Although it is unclear as to what precise work factors constitute each need type, we have divided job aspects into these three need typologies. Consequently, we can view the relationship between category of reward-investment and each discrepancy type. This procedure can allow a more specific focus on the kinds of needs a professional has at a university. Since need discrepancies are a measure of dissatisfaction, we expect our findings in terms of these indices to coincide with previous data concerning general satisfaction. But it could occur that our measures of satisfaction are more or less relevant according to the type of work environment being studied.

Self-Fulfillment Discrepancy

Self-fulfillment needs basically include items on decision making and influence in the organization. Tables XVII-XVIII shows the relationship between reward-investment category and self-fulfillment discrepancy. HR-HI and HR-LI staff at both universities express low discrepancy (indicating high satisfaction). Mann Whitney U analysis depicts significant differences between LR-LI and both HR-HI and HR-LI faculty at university X, and between LR-LI and HR-HI staff at university Y.

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[12] See for example Victor Vroom, *loc. cit.*

TABLE XVII

Category of Reward-Investment and Self-Fulfillment at Universities X and Y

	Category of Reward-Investment					
	University X*			University Y		
Self-Fulfillment Discrepancy	LR-LI	HR-HI	HR-LI	LR-LI	HR-HI	HR-LI
Low	32%	68	78	56	76	64
High	68	32	22	44	24	36
Totals	100 n=25	100 n=19	100 n=09	100 n=27	100 n=33	100 n=14
		N=53			N=74	

TABLE XVIII

Mann Whitney U Category of Reward-Investment and Self-Fulfillment at Universities X and Y

University X			University Y		
High Group	Low Group	Prob. (1 tail)	High Group	Low Group	Prob. (1 tail)
LR-LI	HR-HI	less .05	LR-LI	HR-HI	less .05
LR-LI	HR-LI	less .05			

*Chi square value at University X is 8.400 (n=53, df=2, prob. less than .05 level).

Our general hypotheses are supported as we find significant differences between LR-LI and both HR-LI staff. Once again, however, we find HR-LI persons at university X expressing most satisfaction, while HR-HI respondents at university Y denote highest satisfaction. This difference has been explained when we discussed general satisfaction. One distinction from these tables which needs to be discussed is the contrast in satisfaction between LR-LI respondents at the two universities. Sixty-eight percent of the LR-LI staff at university X report high discrepancy (low satisfaction) compared to only 44 percent of similar faculty at university Y. A possible explanation for the low percentage of LR-LI respondents at university Y who denote discrepancy on self-fulfillment might be that the kinds of needs exemplified by our self-fulfillment measure are generally satisfied at university Y regardless of reward-investment circumstance. Although there is a significant difference between extent of satisfaction according to category of reward-investment, it seems that all respondents report a high level of self-fulfillment. Thus, although HR-HI and HR-LI staff have the most influence and decision making, LR-LI persons also denote such attributes. In contrast, HR-HI and HR-LI respondents at university X seem to monopolize decision making and influence with only 32 percent of the LR-LI persons reporting high satisfaction on this dimension. If this line of reasoning is correct, we should find over-all higher perceptions of decision making and influence at university Y, compared to university X. Tables XIX-XXI depict influence and decisions in terms of one's department, selection of chairman, and recruitment policy. The reader can readily see that there are higher percentages of these variables at university Y than at university X, thus supporting our contention that self-fulfillment is generally more satisfied at the more professional university.

Interpersonal Discrepancy

Interpersonal items basically include congeniality with colleagues and being able to talk effectively with one's chairman. Tables XXII-XXIII show the relationship between category of reward-investment and interpersonal discrepancy. Mann Whitney U analysis shows a significant difference between LR-LI and HR-LI staff at university X, and although no other statistical significance is reported, approximately three-fourths of both HR-HI and HR-LI staff at both universities report high satisfaction on this interpersonal dimension. LR-LI persons generally report moderate to low satisfaction at both schools. In summary, these findings on interpersonal discrepancy closely resemble previous data on self-fulfillment discrepancy.

This association between interpersonal and self-fulfillment dimensions is understandable when we consider that in order to influence your environment, you must be

TABLE XIX

Perceptions of Ability to Influence Decisions on the Directions of the Department

	University X per cent	University Y per cent
1. Strongly Disagree	09	01
2. Disagree	13	07
3. Agree but with reservations	21	14
4. Agree	27	28
5. Strongly Agree	30	49
6. Other	00	01
7. Totals	100 N=56	100 N-76

TABLE XX

Perceptions of Ability to Influence Decisions on the Selection of a Chairman

	University X per cent	University Y per cent
1. Strongly Disagree	20	08
2. Disagree	18	04
3. Agree but with reservations	16	22
4. Agree	19	36
5. Strongly Agree	27	26
6. Other	00	04
7. Totals	100 N=56	100 N=76

TABLE XXI

Perceptions of Ability to Influence Decisions on the Recruitment Policy

	University X per cent	University Y per cent
1. Strongly Disagree	13	01
2. Disagree	11	11
3. Agree but with reservations	14	13
4. Agree	32	34
5. Strongly Agree	30	41
6. Other	00	00
7. Totals	100 N=56	100 N=76

TABLE XXII

Category of Reward-Investment
and Interpersonal Discrepancy
at Universities X and Y

	Category of Reward-Investment					
	University X*			University Y		
Interpersonal Discrepancy	LR-LI	HR-HI	HR-LI	LR-LI	HR-HI	HR-LI
Low	48%	74	78	59	76	71
High	52	26	22	41	24	29
Totals	100 n=25	100 n=19	100 n=09	100 n=27	100 n=33	100 n=14
		N=53			N=74	

TABLE XXIII

Mann Whitney U Category of Reward-Investment
and Interpersonal Discrepancy at Universities X and Y

Interpersonal Discrepancy					
University X			University Y		
High Group	Low Group	Prob. (1 tail)	High Group	Low Group	Prob. (1 tail)
LR-LI	HR-LI	less .05	no significance		

*Chi square value at University X is 4.013 (n=53, df=2, prob. less than .10 level).

able to work with others, especially others in positions of power. In other words, if a person experiences satisfying interpersonal relationships in a system, then his influence and decision making power (self-fulfillment) will be high. If, on the other hand, a person's interpersonal relations are negative, then his influence will also be low. An example of such a negative job situation would be when one's colleagues do not trust you and therefore will not support your decisions or accept your influence in determining aspects of your job. As a result of this close connection between interpersonal and self-fulfillment measures, it may _not_ be an advantage discriminating between these need types. Herzberg, then, may be correct when he includes interpersonal factors under the heading of self-fulfillment needs.[13]

Environmental Discrepancy

Environmental aspects generally include the physical and research features of one's job. As a result, items such as weather, caliber of students, availability of students for research, availability of funds for research, and adequacy of secretarial help are part of this measure. If one were to choose a central theme for environmental aspects, it

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[13]See Frederick Herzberg, _loc_. _cit_., and George Labovitz, _et_. _al_., _loc_. _cit_.

would probably be research opportunities. Tables XXIV-XXV depict the relationship between category of reward-investment and environmental discrepancy. Mann Whitney U analysis shows a significant difference between HR-HI staff and both HR-LI and LR-LI respondents at university Y. While there is no direct evidence to explain why only HR-HI faculty at university Y express environmental satisfaction, perhaps these persons monopolize research facilities and funds. This is a frustrating situation for any low investment person who needs research opportunities to increase his qualifications and advance in the professional system.

Although there is no reported statistical difference between categories at university X, the most dissatisfied staff are the over-rewarded respondents. Sixty-seven percent of such staff express dissatisfaction on environmental factors. This is a surprising finding since HR-LI persons at university X have expressed high satisfaction on previous measures of general satisfaction, self-fulfillment discrepancy, and interpersonal discrepancy. This unexpected result of low satisfaction indicates the importance of measuring satisfaction in a multi-dimensional way. If we had not included environmental discrepancy as a distinct type of dissatisfaction, we might not have uncovered this unanticipated discovery. One explanation for such dissatisfaction may be

TABLE XXIV

Category of Reward-Investment
and Environmental Discrepancy
at Universities X and Y

	Category of Reward-Investment					
	University X			University Y*		
Environmental Discrepancy	LR-LI	HR-HI	HR-LI	LR-LI	HR-HI	HR-LI
Low	46%	58	33	37	76	43
High	54	42	67	63	24	57
Totals	100 n=24	100 n=19 N=52	100 n=09	100 n=27	100 n=33 N=74	100 n=14

TABLE XXV

Mann Whitney U Category of Reward-Investment
and Environmental Discrepancy at Universities X and Y

Environmental Discrepancy					
University X			University Y		
High Group	Low Group	Prob. (1 tail)	High Group	Low Group	Prob. (1 tail)
no significance			LR-LI	HR-HI	less .01
			HR-LI	HR-HI	less .05

*Chi square value at University Y is 10.354 (n=74, df=2, prob. less than .01 level).

the desire of HR-LI persons to increase their investments but at the same time their realization that university X affords little research opportunity. The question arises as to why LR-LI faculty (usually the people who express least satisfaction) report higher satisfaction on environmental factors than HR-LI personnel. Perhaps LR-LI staff view their job situation as temporary and do not expect to increase their investments at this time. An example of such a respondent would be an advanced graduate student who has accepted the job in order to avoid the draft or save enough money for graduate school. This person plans to finish his degree work at a future date and would not be concerned with limited research opportunity at his present organization. HR-LI respondents, on the other hand, are more committed to their present organization and display unhappiness because university X does not offer enough opportunity to increase one's investments. These faculty might be aware of negative cosmopolitan evaluations of persons with low investments, and since there are limited facilities to increase investments at university X, they express dismay that they may never reach optimal cosmopolitan standards. They could also rationalize their situation by blaming others for their low investment circumstances.

Category of Reward-Investment and Leaving

One of the reasonable consequences of dissatisfaction with one's job situation is to leave the organization. Levinson,[14] for example, argues that when organizational conditions are not congruent with a worker's needs, we might expect such a person to reject "conditions of life" in the system and leave. March and Simon make a similar argument by stating that

> dissatisfaction arises from a disparity between reality and the ego ideal held by the individual. The greater the disparity, the more pronounced the desire to escape from the situation.[15]

Our measure of leaving consists of questions on considering other job offers and planning to leave the system as soon as a favorable opportunity becomes available.

Tables XXVI-XXVII depict the relationship between reward-investment category and leaving. Findings at university X show that only 10 percent of HR-HI staff score high on leaving compared to 44 percent of HR-LI people and 64 percent of LR-LI respondents. Mann Whitney U analysis reveals a significant difference between LR-LI and HR-HI personnel at university X. These findings directly support our hypotheses in that HR-HI staff seem to be working under

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[14] Daniel Levinson, *op. cit.*, p. 482.

[15] James G. March and Herbert Simon, *Organizations* (N.Y., John Wiley and Sons, 1958), p. 94.

TABLE XXVI

Category of Reward-Investment and Leaving at Universities X and Y

	Category of Reward-Investment					
	University X*			University Y		
Leaving	LR-LI	HR-HI	HR-LI	LR-LI	HR-HI	HR-LI
Low	36%	90	56	44	58	57
High	64	10	44	56	42	43
Totals	100 n=25	100 n=19	100 n=09	100 n=27	100 n=31	100 n=14
		N=53			N=72	

TABLE XXVII

Mann Whitney U Category of Reward-Investment and Leaving at Universities X and Y

Leaving					
University X			University Y		
High Group	Low Group	Prob. (1 tail)	High Group	Low Group	Prob. (1 tail)
LR-LI	HR-HI	less .001	no significance		

*Chi square value at University X is 12.746 (n=53, df=2, prob. less than .01 level).

optimal conditions and do not wish to leave, HR-LI also express low degrees of leaving, and LR-LI faculty display a high level of leaving, thus indicating their unsatisfying working circumstance.

There are no statistically significant differences between category or reward-investment and leaving at university Y. Although more LR-LI staff wish to leave their situation, percentages on leaving appear evenly distributed. This finding can be explained if we refer to how a professional views job re-location. It has been shown that mobility and advancement for a professional are dependent on being receptive to new job prospects.[16] As a result, we might expect an open attitude toward leaving among faculty at a cosmopolitan university such as college Y. Thus, regardless of one's reward-investment situation, faculty at university Y view leaving as a customary event and it is probably anticipated that personnel are going to consider and possibly accept other job offers.[17] Since this is the norm for all faculty, we can better understand why we find little difference on leaving at university Y.

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[16]For a discussion of professional mobility patterns see Theodore Caplow and Reece McGee, The Academic Marketplace (New York, Doubleday Anchor Book, 1965).

[17]This importance of professionalism in determining leaving shows that the analytic possibilities of our exchange categories are limited according to whether work situations are more or less "professional."

Low Reward-High Investment Faculty

We have discussed the relationship between three of the four categories of reward-investment and the dependent measures of satisfaction and leaving. Research suggests that highest dissatisfaction occurs when one expects a great deal but receives little.[18] LR-HI factors are indicative of such circumstances because such specifications reveal that a person invests highly and receives low rewards. Under such conditions we would expect a large percentage of workers to leave their job situation. This is especially true when we consider that these faculty have the necessary investments or qualifications to obtain jobs elsewhere. Since we only find 5 percent of persons under LR-HI circumstances at university X and 3 percent of similar faculty at university Y, we can reasonably conclude that when faculty perceive themselves as under-rewarded, they leave the situation.

When we examine the small number of cases of LR-HI at the two universities, we find that these respondents are either planning to leave the organization or represent unique situations. One LR-HI subject, for example, wrote

[18]See for example Dana Bramel, *loc. cit.*, George Homans, *loc. cit.*, and Hans Zetterberg, *loc. cit.*

the following account of his job circumstances:

> I am teaching nine hours of subject A and four hours of subject B. I have a low amount of training in A, yet teach nine hours of the same. I am 60 years old and can't live on the salary of a second year instructor, so I must continue my consulting practice. I feel my reputation and competence in my field should qualify me for a rank beyond instructor and a salary commensurate with my experience and ability, but I only have a Masters and no plus, and the chances for promotion look slim.

The above case depicts a faculty member with the "wrong" kinds of investments at a university which emphasizes professional investments. Even though this person feels his situation is unfair, he is unable to leave the system due to his age and lack of qualifications. Aside from such rare instances of LR-HI staff, it appears that faculty under such specifications leave their jobs.

Summary of Analysis

Many of our findings are explained in terms of the extent of professionalism at the organization under study. We find over-rewarded people at university X displaying most satisfaction and lowest scores on leaving, while at university Y, HR-HI personnel express highest satisfaction. This difference may be due to the contrasting importance of high investments between the universities. Usually, LR-LI staff express lowest satisfaction and highest desire to leave, but leaving at university Y seems to be a general behavioral orientation. Job re-location in a professional climate appears to be an expected occurrence, and as a result, persons at university Y display some desire to leave regardless of their reward-investment situation. Finally, we find very few LR-HI respondents; this seems to indicate that under-rewarded faculty tend to leave their work setting.

Our findings indicate that university X is still at home in the local system; the system norm is that reference groups are most appropriately constituted of locals. High organizational rewards at university X validate respect and high esteem for the person. Alternatively, at university Y, more progress has been made toward cosmopolitanism.[19] Appropriate reference groups are generally found among the national association of one's own discipline.[20] Different criteria for a positive self-image are formed here. A low investment person would have great difficulty in building a satisfying self-image since high academic qualifications are considered essential for success.

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[19]For a discussion of cosmopolitans and locals see Alvin Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles," Administrative Science Quarterly (1957-1958), pp. 281-306, 444-480.

[20]March and Simon argue that the greater the degree of professionalism of the individual's job, the greater his identification with a professional group. This identification also increases the person's visibility and allows for easier job relocation. See James March and Herbert Simon, op. cit., p. 70.

CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this research is to understand better the nature of job satisfaction among faculty members. Many of the reviews of job satisfaction studies invariably despair of how little theoretical development has occurred.[1] Yet few topics in social science have had more research. Locke argues that a policy of "correlation without explanation" has been substituted for an understanding of the problem of job satisfaction.[2] This thesis attempts to remedy this lack of understanding and provide an explanation of satisfaction by building a theory of worker motivation based on social exchange.

A helpful way of understanding satisfaction is to focus on the basic process of exchange between a social actor and his environment. We assume that people engage in activities as a means of obtaining goals and these people will only continue their activities if it "pays off." Exchange theory therefore applies when a person

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[1]See for example William Faunce, "Job Satisfaction and the Meaning of Work," paper prepared for U.S. Department of Labor Conference, 1968, and Edwin Locke, "What is Job Satisfaction," Final Report, American Institute for Research, November, 1968, pp. 2-8.

[2]Edwin Locke, *loc. cit.*

attempts to gain some kind of reward from others by exchanging something with them.[3] Basically, our theory suggests that if a person invests highly in his job, his expectations for rewards are also high. In order for the person to express satisfaction with his situation, he must be rewarded to the extent that he expects such rewards from his investments. If such a "fair" exchange does not emerge from his social interaction, the person will view his work role as unsatisfactory and may leave the situation.[4]

Our analysis strongly resembles distributive justice theory in that both formulations predict levels of satisfaction from the extent of equity existing between a person's inputs and the outputs he receives from the system.[5] In the job situation, the person's side of the

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[3]Marvin Olson, The Process of Social Organization (N.Y., Holt, Rinehart and Winston, Inc., 1968), pp. 240-241.

[4]The social role is the linkage point between the person and social structure, and role enactment depends on the exchange of an individual's investments for rewards from the system, see Hans Gerth and C. W. Mills, Character and Social Structure, The Psychology of Social Institutions (N.Y., Harbinger Book, Harcourt, Brace, and World, Inc., 1953), p. 32.

[5]For a discussion of distributive justice, see Stacy Adams, "Inequity in Social Exchange," in Leonard Berkowitz (ed.), Advances in Experimental Social Psychology, Vol. 2 (N.Y., Academic Press, Inc., 1965), pp. 272-273.

exchange are his education, experience, training, skill, seniority, age, and effort he expends on the job.[6] These attributes are what a person perceives as his contributions to the exchange, for which he expects a just return. These factors are the same as Homan's investments.[7] On the other side of an exchange are an individual's receipts. These outcomes include pay, status, respect, and work benefits.[8] A person relates his job situation in terms of what constitutes "fair" correlations between inputs and outputs. The worker learns criteria for justice from past experience and by reference group identification. When a person's expectations for a "fair" exchange are violated, he feels inequity exists.

One of the major difficulties with exchange theory has been conceptualizing the relationship between inputs and outputs in a comprehensive way. Our solution to this difficulty is based on a four-fold schema first introduced by Zetterberg.[9] We predict levels of satisfaction and leaving

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[6]Stacy Adams, _loc_. _cit_.

[7]George Homans, _Social Behavior: Its Elementary Forms_ (N.Y., Harcourt, Brace, and World, Inc., 1961), pp. 74-75.

[8]Stacy Adams, _op_. _cit_., pp. 273, 277-78.

[9]Hans Zetterberg, "On Motivation," in Joseph Berger, _et_. _al_. (eds.), _Sociological Theories in Progress_, _Vol. I_ (Boston, Mass., Houghton Mifflin, Inc., 1966), pp. 139-40.

from the following four reward-investment circumstances: High Reward-High Investment (HR-HI), High Reward-Low Investment (HR-LI), Low Reward-Low Investment (LR-LI), and Low Reward-High Investment (LR-HI). Table XXVIII summarizes our findings in terms of positive-negative balance or imbalance and satisfaction.

TABLE XXVIII

Category of Reward-Investment in Terms of Positive-Negative Balance or Imbalance and Satisfaction at Universities X and Y

	SATISFACTION		
	High	Moderate	Low
X	Positive imbalance (HR-LI)	Positive balance (HR-HI)	Negative imbalance (LR-HI) Negative balance (LR-LI)
Y	Positive balance (HR-HI)	Positive imbalance (HR-LI)	Negative imbalance (LR-HI) Negative balance (LR-LI)

Positive Imbalance (HR-LI)

We present our findings by first considering the imbalanced conditions of overreward (HR-LI) and underreward (LR-HI). Most research on equity deals with the situation of overreward, where the person expects little but receives more than he deserves. There are two contrasting predictions from overreward. On the one hand theorists anticipate a tension state from such positive imbalance.[10] When a person receives more than he expects he will be surprised at his good fortune and feel doubt, uneasiness, or guilt. Discrepancy theory also predicts such negative reactions from overreward because people have a "fear of the strange" and an overrewarded circumstance is both unexpected and unusual.[11] Durkeim states a similar argument when he examines the causes of anomie.[12] He argues that people live in a system characterized by equilibrium and every disturbance of this balance, even if it provides comfort and reward, is stressful.[13] A person is regulated to a particular life style and when this regulation is upset by unexpected reward, the person is unable to cope with

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[10]See for example, Stacy Adams, _op_. _cit_., p. 281.

[11]John Atkinson, _Motives in Fantasy Action and Society_ (New Jersey, Van Nostrand Co., 1958), p. 300.

[12]Emile Durkeim, _Suicide_ (Illinois, Free Press, 1951), pp. 246-48.

[13]_Ibid_.

the new opportunities afforded him.[14] As a consequence, a state of confusion, stress, and anomie may result. Consistency theory also concurs with predictions of stress from imbalanced situations. Such theories predict a tension state when "the logical obverse of one element follows from another."[15] Since high reward is the logical obverse of low expectations for reward, overreward is an imbalanced circumstance and should lead to tension.

In contrast to predictions of tension, incentive theorists anticipate high satisfaction from overreward. Atkinson argues that if a person expects little but receives a great deal, his unexpected good fortune leads to high satisfaction.[16] Our findings, as summarized in Table XXVIII, support incentive theory in that overrewarded staff express either high or moderate satisfaction at both universities. Thus, if the outcome of one's job situation is better than expected, it is a satisfying experience. Our explanation of overreward is not complete unless we realize that the extent of overreward needs to reach extreme proportions before a negative reaction will result. A person's tolerance for positive imbalance (overreward) is greater than his tolerance for negative imbalance

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[14]Emile Durkeim, _op_. _cit_., pp. 15, 252-54.

[15]Leon Festinger in Brehm and Cohen, _Explorations in Cognitive Dissonance_ (N.Y., John Wiley and Sons, 1958), p. 3.

[16]John Atkinson, _op_. _cit_., pp. 279-82, 300-304.

(underreward). Adams presents a similar argument when he states that an overrewarded person is less likely to express discomfort than an underrewarded individual.[17] It is more likely that an overrewarded person could convince himself that he actually deserves high rewards than is that an underrewarded individual could accept the legitimacy of low rewards. Our findings suggest that extreme degrees of positive imbalance are necessary before negative reactions occur. Overreward factors for faculty do not exceed proportions great enough to significantly distort their perceptions of justice.

We also find that HR-LI staff at university X express greater satisfaction than similar faculty at university Y. This difference in satisfaction can be explained by comparing the universities in terms of professionalism. Although we did not expect our research sites to differ on professionalism, it appears that university Y is further advanced with respect to professional attributes than university X. Since the universities differ on professionalism, it is reasonable to assume that faculty at these

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[17]Stacy Adams, *op. cit.*, p. 274.

colleges will also vary in terms of professional identification.[18] Gouldner distinguishes between professional and organizational orientations among academic men and refers to these two type of loyalties as cosmopolitan and local.[19] Cosmopolitans are people who feel little loyalty to their immediate organization. These faculty are devoted to a professional career transcending organizational boundaries and relying extensively on research efforts. Competition for status and recognition depends on academic credentials and publications.[20] Locals, on the other hand, are devoted to an organizational career. Kornhauser argues that since cosmopolitans depend more on research and advanced degrees for advancement, investments are a more crucial aspect for

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[18] William Goode refers to "poles of professionalism" within a single career in "Community Within a Community," _American Sociological Review_ (April, 1957, Vol. 22), pp. 194-200; see also William Snizek's analysis of one's extent of professionalism in "Hall's Professionalism Scale: An Empirical Reassessment," _American Sociological Review_ (February, 1972, Vol. 37), pp. 109-114.

[19] Alvin Gouldner, "Cosmopolitans and Locals: Toward an Analysis of Latent Social Roles," _Administrative Science Quarterly_ (1957-1958), pp. 281-306, 444-480.

[20] For a discussion of competition and recognition among professionals see Warren Hagstrom, _The Scientific Community_ (New York, Basic Books, 1965), Chapter III, and Bernard Barber and Walter Hirsch (eds.), _Sociology of Science_ (Illinois, Free Press, 1962), p. 110.

any cosmopolitan faculty member.[21] Since university Y is more cosmopolitan than university X, there is a greater stress on the importance of investments at university Y. As a consequence of this stress on investments, even if a person is overrewarded at university Y, he is still faced with the limitations resulting from low professional qualifications. In addition, the overrewarded person at university Y is apt to contemplate future problems. Future rewards equal to those presently experienced are dubious because the organization stresses the importance of professional credentials and a low investment person cannot present such attributes. The overrewarded person at university X expresses more satisfaction than his counterpart at university Y because his low investments are not as serious a detriment at his local university. Job advancement at the local college depends more on immediate organizational success. Since investments of credentials and publications are not a prerequisite of rewards at university X, a person with low investments can anticipate rewards in his future academic life.

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[21]William Kornhauser, Scientists in Industry, Conflict and Accommodation (University of California Press, 1962), pp. 118-23; see also Peter Rossi, "Researchers, Scholars, and Policy Makers," Daedalus: The Contemporary University USA (Fall, 1964), pp. 1142-1161, and Bernard Barber, "Some Problems in the Sociology of the Professions," Daedalus: The Professions (Fall, 1963), pp. 669-88.

Negative Imbalance (LR-HI)

The second instance of imbalanced exchange is underreward. Almost all theorists predict dissatisfaction from underreward and common sense would lead us to the same conclusion. Homans maintains that underrewarded persons are upset about their unjust situation and express anger.[22] The only positive evaluation of LR-HI factors is Patchen's contention that underrewarded persons may realize that their efforts are not appreciated and do themselves a favor by leaving their present jobs.[23] Although our data is limited concerning LR-HI staff due to a small number of such respondents, we can assume that such faculty leave the university due to their unsatisfactory circumstances. The few LR-HI respondents present when this research was conducted invariably express dismay concerning their occupational situation. Negative imbalance therefore presents workers with the choice of either adjusting to low evaluations or leaving the system. Our findings indicate that LR-HI staff choose to leave the organization rather than realign their self conception and expectations with the low rewards they are receiving. Those who remain do so for other overriding reasons--e.g., family involvement in the community.

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[22] George Homans, op. cit., p. 76.

[23] Martin Patchen as quoted in Stacy Adams, op. cit., p. 275.

Positive Balance (HR-HI)

The first of our balanced circumstances is high reward-high investment. Some theorists predict low levels of satisfaction from high expectation-reward factors because if a person's expectations are high, then he is almost certain that he will receive the reward, and the actual achievement may only lead to indifference or boredom.[24] But the professional work role is diverse enough so that a person would never be sure of either the reception or nature of expected positive rewards. A classroom situation, for example, can be a new experience each time a course is taught. Regardless of past rewards, a faculty member is not certain that his students will always respond favorably or in the same ways. Thus, even though a person may be confident concerning high expectations, he would not be indifferent or bored about his work situation. HR-HI staff are strongly committed and highly rewarded for their activities. White argues that these work factors lead to optimal motivation.[25] When a person is both challenged and highly invests in a situation, there is a strong sense of efficacy. When this same person is

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[24]John Atkinson, _op. cit._, pp. 298-300, Zetterberg also anticipates a neutral or indifferent reaction from high reward-investment factors, see Hans Zetterberg, _loc. cit._

[25]Robert White, "Motivation Reconsidered: The Concept of Competence," in Edward Sampson, _Approaches, Contexts, and Problems in Social Psychology_ (New Jersey, Prentice Hall, Inc., 1964), pp. 126-28, 138.

highly rewarded, he experiences competence or the mastering of one's environment.[26] These factors of efficacy and competence are most likely for the HR-HI staff member, and as a result, we find HR-HI faculty at both universities expressing high or moderate satisfaction.

Negative Balance (LR-LI)

Theorists usually predict neutral or moderately satisfying reactions from negative balance.[27] Durkeim suggests that when a person expects little reward and receives low reward, he easily adjusts to his situation and will not be tempted to extend the range of his needs indefinitely as does a person who receives increasing increments of reward but is never satisfied.[28] But White argues that high commitment and reward are optimal working conditions,[29] and since LR-LI factors represent the adverse of such circumstances, we would predict low motivation and satisfaction for LR-LI staff. Our findings support White's theory in that we find LR-LI staff expressing low satisfaction at both universities. Not only are efficacy and competence lacking for such persons, but the LR-LI situation can be

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[26] *Ibid*.

[27] See for example, Hans Zetterberg, *loc. cit.*

[28] Emile Durkeim, *op. cit.*, p. 254.

[29] Robert White, *loc. cit.*

viewed as a static and restrictive exchange dilemma. LR-LI faculty have difficulty achieving an acceptable self image due to the negative reinforcement they receive. Also, chances for escape are limited for LR-LI personnel as they lack the necessary academic credentials. Such persons may remain in their jobs, even if dissatisfied, because they have no alternatives. In conclusion, our data suggest a refutation of consistency theory in that although LR-LI factors are balanced (low expectations are returned by low rewards), such circumstances are dissatisfying for the faculty member. It appears that consistency theory must account for the nature of the balanced situation before viable predictions can be made. In our case, professionals working under balanced, LR-LI factors, express dissatisfaction because such conditions represent the opposite of the professionals' needs for efficacy and competence.

Measurement of Satisfaction

When we refer to "satisfaction" in this research, we are examining the variable in a multi-dimensional way. One of the shortcomings of previous research on satisfaction is the limited, general index used to measure satisfaction. Our measures of satisfaction include three discrepancy scores of self-fulfillment, environmental, and interpersonal job factors, and a general index which includes a series of general questions about one's work. The discrepancy indices are based on the theory that satisfaction is a type of response a person makes when those motivational needs activated by the occupational situation are fulfilled; that is, with respect to the specific needs there is a small difference between his desired and achieved job factors.[30]

Even though our general measure of satisfaction includes both work and situational qualities of the job, this index does not discriminate among respondents as well as discrepancy measures do. It seems that such a general set of questions concerning one's work is interpreted by faculty as referring to a complacent or conflict-free work environment. The professional needs a job in which he is challenged and frustrated to some degree in order to have optimal occupational conditions.[31] Since our general satisfaction measure may imply a lack of challenge for professionals, the index loses its discriminatory power because fulfilled staff do not view their situation as complacent and thus report low scores on general satisfaction. This lack of discrimination in our measure of general satisfaction is especially evident among the more professional staff at university X (HR-HI) and among all staff at university Y. This finding makes sense since

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[30]Edwin Locke, _op_. _cit_., pp. 8-50.

[31]Robert White, _loc_. _cit_.

professionals would be more likely to view their situation in terms of challenge and react negatively to a question depicting complacency in their job.

We also find varying degrees of reported satisfaction according to the type of discrepancy measure we use. HR-HI staff, for example, are the only respondents who express high satisfaction on the factor of environmental aspects. This finding may appear because HR-HI persons are able to monopolize research facilities and funds. Persons with low investments, on the other hand, express dissatisfaction because of their limited means to increase their professional credentials. This dissatisfaction of low investment personnel is understandable when we consider that both administrators and outside funding agencies are less likely to allocate scarce resources to persons with low investments, fearing that they will not lead to productivity. Not only do low investment persons lack the visibility that publications give, but they presently lack sufficient facilities and other resources to help them overcome limited past productivity. Finally, we discover a strong association between self-fulfillment and interpersonal dimensions of satisfaction. This finding indicates that faculty who have positive interpersonal relationships also have high influence in decision making. Thus, our data suggest that it is useful to view satisfaction from a multi-dimensional standpoint. Perhaps future

studies will find our satisfaction indices helpful.

Leaving the Organization

Usually exchange theory only predicts levels of satisfaction but it is important to also consider other consequences of equitable or unjust conditions. Men usually do not only become unsatisfied with unjust circumstances; they also try to do something about them.[32] In this study we predict the possible consequence of leaving the organization. Table XXIX summarizes our findings in terms of the relationship between category of reward-investment and leaving at universities X and Y.

Our results on leaving closely resemble our findings on satisfaction. Those exchange factors which lead to dissatisfaction also lead to moderate or high levels of wishing to leave. This correlation between dissatisfaction and leaving has been suggested by many theorists. Patchen, for example, finds that workers who are dissatisfied with their pay have more absences and tend to leave their jobs as compared to men who say their pay is fair.[33] Levinson also suggests that one likely alternative for persons who do not

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[32]Stacy Adams, *op. cit.*, p. 276.

[33]Martin Patchen, "Study of Work and Life Satisfaction, Absences and Attitudes Toward Work Experience," *Institute for Social Research* (Ann Arbor, Michigan, Report No. 11, 1959).

TABLE XXIX

Category of Reward-Investment
in Terms of Positive-Negative Balance or Imbalance
and Leaving at Universities X and Y

	Extent of Intention to Leave the University		
	High	Moderate	Low
X	Negative imbalance (LR-HI) Negative balance (LR-LI)	Positive imbalance (HR-LI)	Positive balance (HR-HI)
Y	Negative imbalance (LR-HI)	Positive imbalance (HR-LI) Negative balance (LR-LI) Positive balance (HR-HI)	

"fit" into their organization is to leave.[34] Our data confirm a positive relationship between dissatisfaction and leaving, and those exchange factors which lead to dissatisfaction (LR-LI and LR-HI) also contribute to leaving, while satisfying exchange conditions (HR-HI and HR-LI) lead to low levels of leaving.

We also find that contemplation of leaving is likely for all faculty at university Y, regardless of exchange circumstances. This discovery can be explained by recognizing that staff at university Y are cosmopolitans. This more professional orientation includes viewing leaving as a natural part of job and career mobility. Achievement in one's profession may depend on relocating to a better setting, and as a result, faculty at university Y have an open attitude toward relocating. It is also probable that individuals at a cosmopolitan organization have greater visibility than faculty at a local college due to more contact with outside sources and exposure to the job market.[35] It seems that there is a positive association between one's professional and cosmopolitan identification

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[34] Daniel Levinson, "Role, Personality, and Social Structure in the Organizational Setting," in Neil Smelser, *et al* (eds.), *Personality and Social Systems* (New York, John Wiley and Sons, Inc., 2nd Edition, 1970), pp. 482-484.

[35] March and Simon, *op. cit.*, pp. 70, 104.

and a desire to leave one's present organization and community. This importance of professionalism in determining leaving shows that the analytic possibilities of our exchange categories are limited. Professionalism is more important with respect to moving than the particular circumstances of reward-investment. Thus, the predictive powers of our analytic schema may be limited in some ways when it is applied in different work situations which may be more or less "professional."

An apparent contradiction to the above reasoning is our finding that only ten percent of HR-HI staff at university X express a desire to leave their school. Why do such staff express low levels of leaving when they are the most professional people due to high investments? From our previous argument we stated that professionals are more likely to view leaving the organization as a natural event. Why then are HR-HI faculty at university X least likely to leave? Perhaps these persons feel that they have progressed as far in their career as they are capable or want to go. Since these faculty have chosen to work at a local university despite their high academic credentials, they may be contented in being high in the status hierarchy at a less competitive school. This contentment is indicated by their low level of leaving. It is also possible that HR-HI individuals may be highly professional-cosmopolitan with respect to occupational aspects of their life but may give priority to other role obligations--e.g., family, community, etc. Such a hierarchy of values may lead to a lowering of aspirations thereby enabling the respondent to achieve a feeling of high satisfaction in a less demanding setting. Finally, some HR-HI staff may not recognize their high investments nor acquire strong enough drives toward increasing investments or moving to institutions of greater prestige and/or research facilities. Overrewarded staff at university X express moderate levels of leaving. Such persons may reason that they have received high rewards with low investments, so they might do better with higher investments. Their aspirations are higher than HR-HI staff, and as a consequence, express higher scores on leaving.

Future Research

This thesis has sought to add to our understanding of problems of satisfaction and job turnover by reassessing them for a professional occupation in terms of theories of social exchange and reference groups, and our analysis of satisfaction leads to important implications for future studies. Although our exchange schema was helpful in predicting levels of satisfaction and leaving, our theory could be further developed if rewards and investments were examined in greater depth. Our measures of these attributes only include some of the more tangible and objective aspects of the inputs and outputs associated with social exchange.

We measure investment, for example, in terms of a person's academic qualifications, age, and length of time at the university, but less tangible investments such as commitment to training and helping students, perhaps measured by the amount of time spent with students, might also be an important index of a person's commitment to his job. By including such subjective aspects of social exchange we start to include elements which could be defined as "costs." Scott, following Homans and the economists, defines the cost of an activity as the value of other activities that had to be forgone in order for it to be performed.[36] The operationalization of cost would be in terms of each person's subjective viewpoint of what constitutes forgone activities.[37] The inclusion of costs as well as further detail in measuring investments may be

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[36]John Scott, Internalization of Norms, A Sociological Theory of Moral Commitment (New Jersey, Prentice Hall, 1971), p. 118.

[37]The operationalization of costs is a complex problem. One approach to the problem is to view cost in terms of alternate costs, as a ratio of forgone activities. This ratio indicates some form of price. Simon argues that the individual is faced with numerous and diverse behavioral alternatives and he must weigh and choose among them. The individual's choices among competing values may be described by a set of indifference curves. These curves reflect which sets of possible consequences are equivalent to each other or mutually "indifferent" to choice. For a further discussion of values and utility of cost see Herbert Simon, Administrative Behavior (New York, MacMillan Company, 2nd Edition, 1961), pp. 73-75.

necessary future steps if exchange theory is to be fully utilized.

Each of our four exchange conditions might also be examined in more detail. Perhaps there are social correlates or descriptions of persons which are more associated with one of our balanced or imbalanced exchanges. Although we did not find such associations, it seems reasonable that there are social characteristics related to persons in one reward-investment category and not others. Possibly categories of exchange are differentiated by attitudes toward students or the importance of family life. Such findings might open new theoretical directions for exchange theory. Along with this type of analysis of each exchange category, one might specifically inspect the flow of underrewarded staff. Our findings indicate that often LR-HI persons have inappropriate investment clusters which limit their mobility. But why do such people come to the organization? How long does it take before such faculty leave? One possible explanation for the occurrence of LR-HI staff is that these persons shift careers due to marginal credentials and/or interests. Their mixed type of qualifications may not fit any one occupational position, and as a result, such workers are not rewarded enough to remain in the organization. Their marginal qualifications and concerns may be so varied and unpatterned that organizations are not prepared to deal effectively or "justly" with such people.

Our exchange schema can be applied to future studies of occupational satisfaction, as well as other areas where the measurement of satisfaction is appropriate. Marital satisfaction, for example, is also dependent on the relationship between a person's inputs and outputs. Investments and rewards could be defined according to the particular area of satisfaction under investigation. While salary is an important reward in one's work, romance and/or children might be crucial incentives for marital satisfaction.

Our findings also show the importance of differentiating between work environments which may be more or less professional. Despite our analysis of exchange circumstances, the category of professionalism or non-professionalism was more powerful and overcame the analytic possibilities of our exchange conditions when predicting leaving. Our data decidedly support Gouldner's argument that local and cosmopolitan standards or the latent roles persons identify with have important behavioral implications for workers.[38] Locals in our study appear to have a keen sense of loyalty to their immediate organization and view leaving as a remote possibility. The extent and nature of this loyalty needs careful scrutiny. Perhaps locals have a high level of concern for job security and

[38] Loc. cit.

fear risking job relocation. These faculty may be convinced that job opportunities are scarce and that it would be foolish to consider moving from their present circumstance, even if their present working conditions are not optimal. This need for security has obvious implications for a worker's extent of job rationalization. The local would tend to increase the salience of positive elements in his work and decrease the importance of negative aspects.[39]

Another interesting effect of local identification is how leaving is handled by the individual and the system when a situation of job relocation does occur. Just how strong is the "umbilical cord" which develops at a local organization? We suggest that persons leaving such an organization would be expected to stay in contact and perhaps even to come back for a visit or work for short periods of time. It is necessary to examine such instances of leaving with reference to whether the person is fired or chooses to leave. We might assume that pressures to maintain contact with the organization vary according to the type of reasons connected with leaving. It might also be important to study how a person reacts to expectations to keep in contact with the organization. A person might

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[39]This is only one of many ways to decrease dissonance, see Stacy Adams, _op_. _cit_., pp. 283-91.

fulfill such expectations because of the possible future need for good recommendations. These local attributes concerning loyalty could be compared with the effects of a cosmopolitan situation.

In this research we view satisfaction as our main dependent variable but it appears that satisfaction might be better conceived as an intervening response that the human being makes to his (reward-investment) situation, and this response indicates certain behavioral consequences. Our instrument measures satisfaction as a response which is derived from the relationship between desired and perceived work factors. All of the self-fulfillment, interpersonal, and environmental aspects are then types of responses to one's working conditions. Future studies might view satisfaction as an intervening reaction to a person's exchange situation. Thus, instead of viewing satisfaction as the dependent variable, we suggest predicting other behavioral consequences as a result of the kind of relation between a person's investments and rewards.

Stressing behavioral consequences of exchange and satisfaction might lead to a variety of predictions concerning worker behavior. We have discussed a few of these outcomes in terms of leaving and how a person might distort cognitively his work situation in order to make his job more agreeable. But many other important behavioral consequences need to be considered. Workers, for example, could increase or decrease their inputs depending on whether they perceived their job situation as over or underrewarded. Such a person could do more than is expected or only perform the minimal duties associated with his position. An individual could also change his reference group and identify with standards which make his own situation more comfortable. A faculty member in this instance, who is underrewarded at a local college, might stress cosmopolitan standards and devote his time and energy to research and publications. These professional activities would simultaneously increase his opportunity for an acceptable alternative position because he would be more visible to and desired by organizations stressing high investments. Another way of reacting to an "unjust" situation is to convince others that one deserves greater rewards. Finally, people can compartmentalize or segmentalize the negative conditions of their work and stress activities outside of their occupation.[40]

We suggest that future research emphasize the behavioral outcomes of working conditions instead of predicting satisfaction. Satisfaction can be conceived of as

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[40]For a summary of possible behavioral outcomes for people in unjust situations, see Stacy Adams, loc. cit.

an intervening response which has important consequences when viewed in relation with the person's exchange circumstances. Along with this analysis of worker behavior, our thesis shows the importance of determining the effect of latent social roles or reference group identification for workers. The analysis of the extent of professionalism in different types of organizations appears to be an important direction for future research.

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APPENDICES

APPENDIX A.

INTELLECTUAL DEVELOPMENT OF THE PROBLEM

The purpose of this section is to briefly describe the intellectual development of our research problem. Most reported studies neglect to state the modifications in theory or design which are often made between the initial conception of the problem and completed study. But it might be beneficial to other scholars to know the theoretical and operational changes that may take place during the process of social inquiry.

In this thesis, we initially proposed to study the relationship between role consistency and job satisfaction. We predicted that a lack of discrepancy between desired and perceived work factors leads to satisfaction and a low level of leaving. As our investigation progressed, we noted that the lack of discrepancy between what a person desires (personal role definition) and perceives (perceived role) could be conceived as a form of satisfaction. Instead of associating one satisfaction index (lack of discrepancy) with another (a general measure of satisfaction), we searched the literature for a theory which could explain both discrepancy and general indices of satisfaction. Exchange theory seemed to provide a powerful explanation for variance in our dependent measures of satisfaction and leaving. Specifically, we conceptualized exchange theory in terms of the relationship between rewards and investments, and how these factors lead to favorable or unfavorable working conditions. This theoretical reformulation from role to exchange theory was accompanied by the chance finding that our two university sites differed significantly in terms of professionalization. Originally, we proposed to compare two similar universities changing from teaching to research concerns, but this difference in professionalization between our two colleges became a focal point in our theoretical interpretations.

Our rationale for reformulating our problem is that a researcher should be open to modification of old inquiry directions if new insights might lead to a better understanding of his problem. This rationale for a flexible research design is not without possible risks. These risks include the post hoc fallacy where one explains the relationship among variables without adequate controls. This procedure may lead to forced interpretations of the data to suit a selected theory. Our thesis may also suffer because the universities in our analysis were not originally chosen as representative of distinct poles of professionalism. Thus, conclusions in this study which are based on differences in professionalism may be a result of chance rather than fact.

Although we admit the dangers of post hoc analysis and basing our analysis on an unexpected difference between colleges, our revised theoretical emphasis appears to provide a more meaningful explanation of the area of professional satisfaction than if we had relied on our initial theory.

APPENDIX B.

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QUESTIONNAIRE

JOB SATISFACTION AMONG FACULTY MEMBERS

This questionnaire attempts to explore some of the important aspects of being a faculty member. We are interested in the type of work aspects a person desires, how this person perceives his work situation, and what types of job conditions lead to satisfaction.

To save you time, most questions have been arranged so that all you have to do is make a check in answering. Please answer every question, selecting the response that comes closest to representing your feelings, (even if it doesn't do so exactly). The questionnaire is arranged so that there is room for any comments at the end of each section; feel free to write on the back of any page.

No name need appear on any part of this instrument but each instrument is identified by a number. This is necessary so that we have a record of those persons who do not answer the questionnaire. These people will be contacted again later. ALL OF YOUR RESPONSES WILL BE HELD IN STRICTEST CONFIDENCE.

Realizing that many of you are pressed for time, this questionnaire should take no more than 15-20 minutes to complete. This is an honest estimate, based on pre-tests. The data will be used for purposes of my Ph.D. dissertation and ensuing publications.

Your effort to answer and return this questionnaire is greatly appreciated. I do ask that you return the questionnaire in the self-addressed envelope enclosed before (   ) or 10 days after receipt so that this researcher can meet his deadlines.

Thank you,

Howard Borck
Dept. of Sociology
Michigan State University

SECTION I

If you had the opportunity to construct the perfect faculty job for yourself, which of the following aspects would be important to you? Consider each aspect independent of all the other aspects

Job Aspects	No Import.	Little Import.	Import.	Considerable Import.	Great Import.
1. Good reputation of college					
2. Good reputation of department					
3. Adequacy of office space					
4. Adequacy of secretarial help					
5. Congeniality with colleagues					
6. Location having agreeable weather for me					
7. Caliber of undergraduates					
8. Caliber of graduates					
9. Small class size					
10. Availability of students for teaching or research assistance					
11. Recreational, cultural opportunities in community					
12. Opportunities for service to and participation in community affairs					
13. Being able to talk openly and effectively with chairman					
14. Having job which does not interefere with leisure activities					
15. Department supportive of type of philosophy of education that I personally agree with					
16. Funds available to attend professional meetings					

	No Import.	Little Import.	Import.	Considerable Import.	Great Import.
17. Opportunity for consulting					
13. Having adequate research facilities					
19. Having an acceptable teaching load					
20. Having availability of funds for research					
21. Being able to teach the particular courses I prefer					
22. Having a voice in determining direction and goals of department					
23. Having opportunity to participate in selection of dean, chairman					
24. Having opportunity to influence decisions concerning recruitment of new faculty					

25. The type of work environment where I would be most happy is:

a) where the rewards and incentives are almost exclusively for research( )
b) where the rewards and incentives for research are stressed over teaching ( )
c) where rewards and incentives are equal for research and teaching ( )
d) where rewards and incentives for teaching are stressed over research ( )
e) where rewards and incentives are mainly for teaching ( )

26. If there are other aspects of your work which are important to you, and which we have neglected, please specify:

Other Comments:

SECTION II

In this section we are interested in your present working conditions. Please objectively evaluate the extent to which you would agree the following factors are present in your current job situation. Keep in mind we are only interested as to the extent to which you would agree these factors are present, not as to how satisfied you are regarding these factors.

YOUR ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE.

Present Job Aspects	Strongly Disagree	Disagree	Agree, but with reser- vation	Agree	Strong- ly a- gree
27. Good reputation of college					
28. Good reputation of de- partment					
29. Adequacy of office space					
30. Adequacy of secre- tarial help					
31. Generally high con- geniality with col- leagues					
32. Location having a- greeable weather for me					
33. High caliber of un- dergraduates					
34. High caliber of gra- duate students					
35. Relatively small class sizes					
36. Availability of stu- dents for either teach- ing or research as- sistance					
37. Adquate recreational, cultural opportuni- ties in community					
38. Enough opportunity for service to, and parti- cipation in community					
39. I am able to talk openly and effectively with chairman					
40. This job doesn't inter- fere with my leisurely activities					
41. This department is suppor- tive of the type of phil- osophy of education I personally agree with					
42. University affords ade- quate research facili- ties					

	Strongly Disagree	Disagree	Agree, but with reservation	Agree	Strongly agree
43. I have an acceptable teaching load					
44. Funds are available for research					
45. I am able to teach the courses I prefer					
46. I have a voice in determining direction and goals of department					
47. I have the opportunity to participate in selection of dean, chairman					
48. I have opportunity to influence decisions concerning recruitment of new faculty					

49. In this department:

a) the rewards and incentives are exclusively on research ( )
b) the rewards and incentives for research are stressed over teaching ( )
c) the rewards and incentives are equal for teaching and research ( )
d) the rewards and incentives for teaching are stressed over research ( )
e) the rewards and incentives are mainly on teaching ( )

50. If there are any other aspects of your work which we have neglected, and you feel are important in determining satisfaction, please comment:

51. How would you characterize the degree of respect as a scholar that you receive from colleagues in your department?
excellent ( ) good ( ) adequate ( ) less than satisfactory ( )

Any comments:

SECTION III

In this section we are interested in changes that have recently or are presently happening in your department and university. Please answer the questions to the best of your knowledge; we are more interested in your perceptions than objective truth.

Types of possible changes	Strongly agree	Agree	Agree, but with reservation	Disagree	Strongly
52. Department presently or recently changing from teaching-orientation to professional activities					
53. Drastic changes in undergraduate curriculum					
54. Drastic changes in graduate curriculum					
55. Recruitment policy changes					
56. High degree of faculty turnover					
57. High increase in research grants for faculty and graduate students					
53. High increase in number of fellowships awarded to students					
59. Heated debate as to the direction and ideology of department					

SECTION IV

In this section we are interested in job satisfaction. Notice we are differentiating between satisfaction with the work you do or are committed to, and the type of work environment you are presently in. <u>YOUR ANSWERS WILL BE HELD IN STRICTEST CONFIDENCE</u>.

	Stongly Agree	Agree	Dis-agree	Strongly disagree
60. I have fulfilled, or feel I will fulfill, the expectations I had for myself when I first came to this job				
61. I am happy and satisfied with my work itself, aside from departmental expectations				
62. I am happy and satisfied with my work IN THIS DEPARTMENT				
63. Most days I am enthusiastic about doing the type of work I think is appropriate				
64. Most days I am enthusiastic about coming to work IN THIS DEPARTMENT				
65. I am satisfied with the types of changes occuring in this department's goals and objectives				
66. Quite a number of things about the work expectations IN THIS DEPARTMENT annoy me				
67. I sometimes become angry at the way things are done IN THIS DEPARTMENT				
68. I have recently considered other job offers				
69. I plan to leave this job as soon as an acceptable opportunity presents itself				
70. I am definitely leaving this position				

Any comments:

SECTION V

71. Sex: male ( ) female ( )

72. How old were you on your last birthday? 30 or under ( ); 31-35 ( ); 36-40 ( ); 41-45 ( ); 46-50 ( ); 51-55 ( ); 56-60 ( ) over 60 ( ).

73. Number of articles published in journals in the last five years: 0 ( ); 1-2 ( ); 3-5 ( ); 6-10 ( ); 11 or more ( ).

74. Number of books written or edited in the last 10 years: 0 ( ); 1-2 ( ); 3 or more ( ).

75. Number of research grants obtained in the last five years: 0 ( ); 1-2 ( ); 3 or more ( ).

76. Number of above grants over $1000.00: 0 ( );1 ( ); 2 ( ).

77. Married? Yes ( ); No ( )

78. Number of children in elementary school or high school: 0 ( ); 1 ( ); 2 ( ); 3 ( ); 4 or more ( ).

79. How long have you worked at this university? less than one year ( ); 1-3 years ( ); 4-6 years ( ); 7-10 years ( ); 11-15 years ( ); 16-20 years ( ); 21-25 years ( ); 26-30 years ( ); 31 and more years ( ).

80. Faculty rank within your department: Asst. Instructor ( ); Instructor ( ); Asst. Prof. ( ); Assoc. Prof. ( ); Prof. ( ); Prof. Emeritus ( ); Lecturer ( ); Chairman (Dept.) ( ); Other admin. position ( ).

81. Highest degree obtained: B.A. or B.S. ( ); M.A. or M.S. ( ); All work except dissertation ( ); Ph.D. or other doctorate ( ); other: ______________________________

82. Have you been offered another job in the last five years? Yes ( ); no ( ).

83. Have you achieved tenure? Yes ( ); No ( ).

84. Check the discipline you now work in: Sociology ( ); Psychology ( ); Pol. Science ( ); Economics ( ); Anthropology ( ); If other, please specify: ______________________________

85. Before taxes, your gross salary from your faculty position in your department for 1968-69 (excluding extension teaching, teaching at another university, consultation, and books and royalties) will be: less than 7000.00 ( ); 7000-7900 ( ); 8000-8999 ( ); 9000-9999 ( ); 10,000-10,999 ( ); 11,000-11,999 ( ); 12,000-12,999 ( ); 13,000-13,999 ( ); 14,000-14,999 ( ); 15,000-17,999 ( ); 18,000-19,999 ( ); 20,000-24,999 ( ); 25,000-29,999 ( ); 30,000 and over ( ).

86. This is a nine- or ten-month salary ( ); twelve-month salary ( ).

87. How do you judge faculty benefits (health insurance, life insurance, retirement benefits, etc.) at your university and department? excellent ( ); good ( ); adequate ( ); poor ( ); very bad ( ).

88. How long have you held your present faculty rank? less than one year ( ); 1-3 years ( ); 4-6 years ( ); 7-10 years ( ); 10-14 years ( ); 15 years or more ( ).

89. What is your usual teaching load per term or semester? 3 hours ( ); 6 hours ( ); 9 hours ( ); 12 hours ( ); more than 12 hours ( ).

90. Please specify the university where you finally obtained your highest degree: ______________________________

91. If you are working on a degree, please specify the degree-granting institution: ______________________________

92. Which universities are persons you studied with in graduate school presently at? List a few of the universities you know for sure:

____

____

____

____

93. Relative to your own situation, how would you characterize the present positions of persons who went to school with you? (Those persons now in faculty positions):

a) doing about the same as me ( )
b) doing better than I am, considering we have nearly the same qualifications ( )
c) doing poorer than I am ( )
d) doing better than me, but they have better qualifications ( )

Any comments:

APPENDIX C.

Dear Faculty Member,

Approximately two weeks ago I left a questionnaire on job satisfaction with you. I have not had any response from you as of this date.

Today I stopped by to see you and answer any questions you might have concerning the questionnaire. Since I didn't catch you in, I hope this note will suffice. If not, feel free to call me at 517-353-5143

If the reason you didn't fill out the questionnaire is because of the identification number on the instrument, just rip off the front page. The identifcation number is just for follow-up purposes and all responses are confidential.

If you haven't returned the questionnaire because of lack of time, the instrument only takes from ten to fifteen minutes to fill out.

In any case, I know that you realize the struggle involved in obtaining the necessary response rate for a research project. Therefore I would very much appreciate you filling out and returning the attached questionnaire (or the one you already have).

Please do this at your earliest convenience.

Thank you,

Howard E. Borck

Department of Sociology
Michigan State University

APPENDIX D.

INTER-CORRELATIONS OF INDICES FOR REWARDS AND INVESTMENTS FOR 132 SOCIAL SCIENCE FACULTY*

Reward Factor		X_1	X_2	X_3	X_4	X_5
Respect from colleagues	X_1	-	.27	.23	.12**	.50
Rank	X_2		-	.68	.42	.15**
Salary	X_3			-	.27	.20**
Faculty benefits	X_4				-	.27
Light teaching load	X_5					-

Investment Factor		X_1	X_2	X_3	X_4	X_5	X_6	X_7
Age	X_1	-	.28	.37	.27	.22	.72	.47
Number of articles	X_2		-	.31	.53	.54	.09**	.40
Books written	X_3			-	.14**	.16**	.33	.15**
Research grants	X_4				-	.80	.49	.23
Grants over 1000.00	X_5					-	.14**	.27
Length of time at university	X_6						-	.29
Degree obtained	X_7							-

*all (r) correlations except (**) are significant at the .05 level or beyond