ABSTRACT

TECHNOLOGY AND WORK EXPERIENCE
A STUDY OF THE INDIAN AUTOMOBILE WORKER

By Baldev R. Sharma

This study was designed to examine the relation between social structure, as manifested in the man-machine relationships within an industrial enterprise, and personal experience among the production and maintenance workers of an Indian automobile factory. Our main assumption was that if we knew enough about the social structure and a person's position in it, it should be possible to predict the personal experience of its members.

Following similar studies already done in the United States, we used a typology of variations in technological work environment. Three types of work environments were identified, which differed from one another in terms of: (1) the degree of freedom or control over the work process, (2) the degree of skill required in the execution of daily functions, and (3) whether the functions are repetitive and monotonous or challenging. These three types of work environment yielded three corresponding types of workers - the craftsmen, machine operators, and assemblers. And these three categories of workers represented, for purposes of this study, three occupational status groups - high, medium, and low - respectively. Throughout this study, occupational status thus defined was used as the main independent variable.

The dependent variable, personal experience, was operationalized in two different ways: (1) worker's satisfaction with different aspects of his work, and (2) certain aspects of worker's behavior. We expected that the higher the occupational status within the factory, the greater the level of satisfaction of the worker and also, the greater the worker's involvement in his activities both at work and outside the factory. The present study sought to test this main hypothesis through a series of sub-hypotheses.

The following four "areas" of worker satisfaction were investigated: (1) the situs, (2) the firm, (3) the occupation, and (4) the job. Except for satisfaction with the firm, occupational status was found to be associated with every aspect of worker satisfaction. And the direction of association in such cases was generally in support of the main hypothesis, that is, the workers in higher status jobs (in contrast to those in lower status jobs) were generally more satisfied with their work experience. Next, the relationship between occupational status and worker satisfaction was examined by controlling for each of the other correlates of satisfaction. Once again, except for satisfaction with the firm, the relationship between occupational status and worker satisfaction persisted. This supports the theory that personal experience is to some extent shaped by a person's position in the social structure. However, the limited application of multivariate analysis revealed that the original relationship between occupational status and worker satisfaction was not always "independent" of other factors. We were able to "specify" some of the conditions under which occupational status was most relevant in affecting worker satisfaction.

The second variant of "personal experience" consisted of certain aspects of worker behavior. The following four "areas" of worker behavior were selected for investigation: (1) attendance at work, (2) union involvement, (3) neighborhood involvement, and (4) community involvement. Of these four areas, union involvement (as measured through participation in union activities) was the only variable found to be related to occupational status. But even in that one case the relationship disappeared completely when controlled for either wages or seniority. The results of multivariate analysis in this case revealed that under none of the circumstances examined was worker behavior in the selected areas a function of occupational status within the factory.

In addition to the theoretical considerations as outlined above, the findings of this study were analyzed in terms of their implications for (1) the theory of labor force commitment and (2) the changing stratification system of modern Indian society. In both of those areas, our findings call into question the prevailing theories which emphasize the importance of traditional cultural patterns that, allegedly, impede the development of a committed industrial work force in developing societies.

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology

1967

ACKNOWLEDGMENTS

This dissertation signalizes the completion of seven years of graduate study in the United States of America, interrupted once by a year of field work in India. It is indeed an appropriate occasion to acknowledge my debt to the many people and agencies without whose help I would not be writing these lines today.

My greatest debt is to my wife, Raj, who, in the best Indian tradition, has sacrificed much to make our dream come true. Rearing four sons is a trying experience under the best of circumstances, but how much more so when this, along with many others, becomes the responsibility of a woman whose husband is away for seven years! I salute her courage and dedication. I am grateful, also, to my parents for their understanding and support throughout this long period of formal academic training.

To my friends and colleagues at Punjab Engineering College, Chandigarh, India I shall always be indebted for the initial inspiration and subsequent help in many ways. The generous moral and material assistance of Mr. Harikishandas Aggarwal, Devidayal Cables, Bombay and the late Mr. I. S. Sachar, Sachar Educational Foundation, Delhi made possible my arrival at Oberlin College in 1960.

I owe special thanks to my first teachers of sociology at Oberlin College, Professors Joseph W. Elder, Kiyoshi Ikeda, Richard R. Myers, George E. Simpson, and J. Milton Yinger. They shall long

be remembered as representing the very best of American liberal education.

I am grateful to the faculties of sociology and anthropology at Michigan State University, especially to the members of my guidance committee, Professors William H. Form (chairman), James B. McKee, Charles P. Loomis, and John Useem, for their advice and stimulation through the years. It was indeed an honor and a privilege to work with and to receive academic apprenticeship from scholars such as these.

The debt I owe to Professor Form is more than words can express. Throughout my graduate study at Michigan State University, Professor Form provided invaluable direction to, and steady support for my intellectual development. His unrelenting confidence in me and his high standards of scholarship shall always be a constant source of inspiration.

The Asian Studies Center and the Center for International Programs at Michigan State University deserve my sincere thanks for their generous financial support, which enabled me to go to India and to pay for the research expenses.

I wish to acknowledge my deep appreciation to the Shri Ram Centre for Industrial Relations, New Delhi for their support of this research. While the Michigan State University had provided for my travel to India and back, in addition to other expenses for research, the success of the project depended to a large extent upon the generous support of the Shri Ram Centre through a senior research fellowship for the duration of my field work in Bombay.

Last but not least I am most grateful to the management of Premier Automobiles Limited, Bombay, the union leadership, and each of the 290 workers interviewed for their full cooperation in this research.

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CHAPTER I

INTRODUCTION

This study aims to explore and specify the relation between technological work environment and certain related attitudes and behavior patterns among the industrial workers of a non-Western, developing society. The industrial unit selected for study is an automobile factory in Bombay, India. The study is a part of a larger research project undertaken by Professor William H. Form to investigate the orientations of automobile workers toward their jobs, their union, and their community in different socio-cultural settings.

Chapter I spells out the theoretical basis of the present study and contains, in addition, a brief review of research on the subject. The review of pertinent research literature is continued in Chapter II, which also specifies the problem under investigation, gives operational definitions of the major concepts, and lists the hypotheses to be tested. Analysis of data will be presented in the following three chapters. Chapter III describes the factory and the characteristics of its work force, while the testing of hypotheses will be taken up in Chapters IV and V. Finally, Chapter VI concludes by summarizing the findings, interpreting them in light of related research literature, and making suggestions for further research.

Our main theoretical orientation follows the Industrial Man

thesis as proposed by Inkeles.[1] Along with him we assume that the technological aspects of industrial work are critical in determining attitudes and behavior of industrial workers. We propose to test the general hypothesis that the patterns of satisfaction which the Indian automobile worker derives from his occupational activity, and the degree of his involvement in various aspects of social and occupational life, are positively related to his technological work environment, as manifested in his occupational status.

The assumption that certain social-phychological phenomena can be predicted on the basis of a knowledge of the social structure is derived from, among others, Durkheim.[2] But it would perhaps be more accurate to say that most classical theorists who were concerned with the social order maintained a similar "structuralist" position.[3] During the last decade or so, many writers have shown that a wide range of social-psychological phenomena can be accounted for by certain structural features of the society. Lipset and Bendix, for example, found that occupational aspirations were correlated with industrial maturity of a society.[4] Kornhauser and others suggest

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1. Alex Inkeles, "Industrial Man: The Relation of Status to Experience, Perception, and Value," American Journal of Sociology, 66 (1960), pp. 1-31.

2. Emile Durkheim, The Rules of Sociological Method, Glencoe, III,: The Free Press, 1950. Also, his Suicide, Glencoe, III.: The Free Press, 1951 and The Division of Labour in Society, Glencoe, III.: The Free Press, 1947.

3. While Durkheim analyzed "anomie" in terms of social-structural variables, Marx and Weber followed essentially the same approach in their respective studies of "alienation" and "bureaucracy."

4. Seymour M. Lipset and Reinhard Bendix, Social Mobility in Industrial Society, Berkeley: University of California Press, 1959.

(as did Durkheim long before) that alienation is correlated with some structural factors.[5] Furthermore, considerable evidence exists to show that level of occupation has a clear-cut effect on job attitudes of workers. In a detailed review of several studies, Blauner concludes that the higher the occupational level, the greater the worker's satisfaction with his job.[6] Inkeles has shown that the relationship between level of occupation and job satisfaction also holds at the cross-national level.[7] And Inkeles' thesis is supported, at least in a general way, by Lambert who reports that "in the Indian factories studied there is a genuine but mild positive relationship between membership in the broad occupational classes and degree of favorableness toward the factory and its management."[8] The findings of several other studies generally support the theoretical perspective outlined above.[9]

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5. William Kornhauser (ed.), Industrial Conflict, New York: McGraw-Hill, 1954.

6. Robert Blauner, "Work Satisfaction and Industrial Trends in Modern Society," in W. Galenson and S. M. Lipset (eds.), Labor and Trade Unionism, New York: John Wiley, 1960. Also see: Frederick Herzberg et al., Job Attitudes: Review of Research and Opinion, Pittsburgh, Pa.: Psychological Service of Pittsburgh, 1957; Gladys L. Palmer, "Attitudes Toward Work in an Industrial Community," American Journal of Sociology, 63 (July, 1957), pp. 17-26.

7. Inkeles, op. cit.

8. Richard D. Lambert, Workers, Factories, and Social Change in India, Princeton, New Jersey: Princeton University Press, 1963, pp. 211-212.

9. See for example: Richard Centers, "Motivational Aspects of Occupational Stratification," Journal of Social Psychology, 28 (1948) pp. 187-217; William H. Form and James A. Geschwender, "Social Reference Basis of Job Satisfaction: The Case of Manual Workers," American Sociological Review, 27 (April, 1962), pp. 228-237; Aaron Levenstein, Why People Work, New York: Crowell-Collier Press, 1962; and Nancy C. Morse and Robert S. Weiss, "The Function and Meaning of Work and the Job," American Sociological Review, 20 (April, 1955), pp. 191-198.

Modern Technology and Work Experience

One of the outstanding structural features of contemporary Western societies is "industrialism" and its most characteristic organizational form is the "factory." Both industrialism and the factory system are becoming pervasive almost universally. As Kahl points out, "Since the Second World War the rate of industrialization has increased as people in previously isolated or tradition-bound societies have entered the main stream of world history to demand the material benefits of modern technology."[10] Now, the introduction of factory system as the new mode of production is said to have profound repercussions on the rest of culture.[11] This study examines the impact of technology on work experience of modern industrial workers in India.

The relations of the modern industrial worker to his work environment stand in sharp contrast to the craft occupations or farming in the pre-industrial era. The factory worker becomes what Marx called a "wage slave." He no longer owns the product of his labor nor the means of production. Moreover, the trend toward specialization (or, division of labor as it is often called) tends progressively to build skill into the machines, thereby reducing the possibility of worker control or initiative in the production process. Finally, the modern factory worker works, typically, in a big factory which is run by a bureaucratic administration with

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10. Joseph A. Kahl, "Some Social Concomitants of Industrialization and Urbanization," Human Organization, 18, 2, pp. 53-74.

11. Ibid. Also see: Frederick Herzberg et al., The Motivation to Work, New York: John Wiley and Sons, 1959, Chapter 13.

formal rules. Marx saw in this state of affairs the seeds of widespread alienation among modern industrial workers.[12]

While Marx attributed work alienation to an employee's relationship to the owners of the means of production, and thus linked alienation to the capitalist order, more recent writers such as Feuer[13] and Blauner[14] have emphasized the man-machine relationship as the more critical source of work alienation. Feuer points out, for example, that "alienation of man from the machine, which stands against him, imposing its rhythm on him so that he is a satellite to its motions, is something which is common to all industrial societies, whether they be capitalist or socialist."[15] With the coming of automation and other continuous-process production methods, some writers suggest that work alienation may be abating, at least in automated industries, and that a curvilinear relationship seems to exist between work alienation and advance in technology.[16]

Since it is not the main objective of this study to analyze work alienation(or, its opposite "job satisfaction") per se, we will examine this phenomenon only in relation to a few selected variables. And since technological work environment is our main

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12. Karl Marx, Economic and Philosophical Manuscripts of 1844, Moscow: Foreign Languages Publishing House, n.d.

13. Lewis Feuer, "What is Alienation? The Career of a Concept," in Maurice Stein and Arthur Vinich (eds.), Sociology on Trial, Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

14. Robert Blauner, Alienation and Freedom: The Factory Worker and His Industry, Chicago, University of Chicago Press, 1964.

15. Feuer, Op. cit., p. 138.

16. Blauner (1964), op, cit. Also see: William Faunce, "Automation and the Division of Labor," Social Problems, 13 (Fall, 1965), pp. 149-160.

independent variable, the discussion thus far has been confined to the writings dealing with the relationship between technology and work experience. A reference to some of the other perspectives and studies of job satisfaction will be made at a later stage.

We prefer not to use the term "alienation" to refer to negative attitudes of workers toward their work experience. Instead, we will use the more conventional terms like "satisfaction" and "dissatisfaction," for the latter are easily understood and are also free from the ideological bias associated with the concept of alienation.[17] A brief mention of the concept of alienation seemed appropriate because some writers (e.g., Blauner) have used it more or less interchangeably with worker dissatisfaction.[18]

Job satisfaction is typically a function of the mechanics of modernization, for the jobs themselves are a function of the modern market system. In the pre-industrial (traditional) society, distinctions between work and non-work are often blurred. The occupational life of the traditional handicraft worker, for example, was seldom at the mercy of the purely economic forces. Such a worker was protected by such institutional arrangements as the extended family, the tribe, the caste, or the occupational guild. The process of industrialization, among other things, leads to division of labor among the various institutional patterns of the society.

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17. Blauner (1964), op. cit., p. 4. Blauner says that this hypothesis has inspired fruitless polemics more often than serious scientific research.

18. Mills maintains that equating "alienation" with job dissatisfaction is a distortion of Marx's conceptualization. See C. Wright Mills, The Marxists, New York: Dell Publishing Company, 1962, p. 86.

The shift of the traditional handicraft artisan to the modern factory creates several problems, including loss of security. In the industrial community, as noted by Kerr and his associates, new relationships based upon employment and occupation come to replace the larger family and village attachments. In this study we propose to examine whether the mechanisms which give rise to job dissatisfaction in advanced industrial societies: (1) also arise in the urban-industrial context of a developing society, (2) are the same, and (3) account for the same internal variations. Yet, this is not a direct comparative study, although its findings will be analyzed by frequent comparisons with related research based on the experience of the industrial worker in the West.

Review of Research Literature

The number of studies dealing with job attitudes has become so large that the newcomer to the field may be appalled by it. Most of the research in this area, however, has been of an applied nature, centered around organizational processes that contribute to the worker satisfaction.[19] But in spite of the abundance of research the concept of job satisfaction, with its multiplicity of connotations and implications, still poses one of the most difficult problems for a student of industrial relations. Published studies differ in terms of their purpose (e.g., solution of specific problems or search for principles), scope (e.g., study of a particular work organization, an industry, an entire occupation,

19. For reviews of some of the studies of job satisfaction, see Herzberg et al. (1957), op. cit. and Thomas B. Scott et al, A Definition of Work Adjustment, Minneapolis: University of Minnesota Industrial Relations Center, 1960.

or inter-industry comparisons), and method (e.g., paper-and-pencil research or depth interviews). In the face of such a variety of research material, therefore, only a few representative studies will be discussed here.

Elton Mayo, often regarded as the founder of modern industrial sociology in the United States, was one of the first to interest himself in the problem of repetitive and mechanically-paced work in the modern factory. In one of his early essays, "What is Monotony?" Mayo talks of boredom caused by repetition, or "doing the same thing over and over again," in a typical industrial work environment.[20] Mayo's subsequent studies, including the famous "Hawthorn experiment," emphasized the importance of work content in relation to fatigue. The more recent studies by Walker and several others showed that an equally important factor contributing to fatigue in man-machine relationship is "pacing," or the coercion of human rhythm into machine regularities together with a matching of machine speeds.[21] Whyte's study of a wooden toys factory demonstrated, among other things, the importance of worker control over pacing.[22] Whyte found that when the production operators themselves were allowed, instead of by the engineers, to regulate the speed of the moving hooks, their rate of production increased by thirty to fifty percent. Similarly, certain studies in English factories have shown that extreme repetitiveness reduced productivity of the

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20. Elton Mayo, The Human Problems of an Industrial Civilization, New York: The Macmillan Company, 1933, Chapter II.

21. Charles R. Walker, Modern Technology and Civilization, New York: McGraw-Hill, 1962, p. 73.

22. William F. Whyte, Money and Motivation, New York: Harper and Bros., 1955, pp. 90-96.

industrial worker.[23] It seems that the few works that deal with the impact of technological work environment on work experience are mostly concerned with the problem of repetitive and paced work.

The relatively high emphasis on studies of repetitive and mechanically-paced work in recent years can be seen from a large number of studies of workers on the automobile assembly line. As an English writer has charged, the studies of workers in car assembly plants have outnumbered those of any comparable industrial or occupational group.[24] During the short period of one decade, 1952-1961, at least seven book-length monographs based on automobile assembly plants have appeared in the United States and Great Britain.[25] Of these several studies, Automobile Workers and the American Dream (by Chinoy) and The Man on the Assembly Line (by Walker and Guest) are probably the best known and widely cited monographs. The findings of the most of these studies have shown a relatively high degree of consistency. The assembly line worker is described as the dissatisfied worker and his dissatisfaction is attributed primarily to the technological work environment created by the "line". Work on the assembly line is characterized by such features as "routine," "repetitive," and "mechanically paced." Now, many of these features of work are to be found in other mass-production industries, but it is argued that they appear with a unique emphasis when applied to the automobile assembler's job.

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23. Walker, op. cit., p. 104.

24. John H. Goldthorpe, "Attitudes and Behavior of Car Assembly Workers: A Deviant Case and a Theoretical Critique," The British Journal of Sociology, 17 (September, 1966), pp. 227-244.

25. Ibid., p. 241 (footnote).

The above findings about work on the assembly line have been questioned by at least two writers. In a study of automobile workers in suburbia, Berger criticized Chinoy and others for imputing alienation to manual workers.[26] On the other hand, a recent article by Goldthorpe questions the very basis of the argument that assembly-line technology has much to do with work experience. He contends that far more important than technology are workers' orientations (or, wants and expectations relative to work), which are said to mediate between the objective features of the work situation and their actual experience of that situation.[27]

Argyris argued that the lack of control by employees over their work environment is one of the characteristics of formal organizations, which are said to be inconsistent with the needs of emotionally healthy individuals.[28] This inconsistency, Argyris maintains, results in job dissatisfaction as well as certain personality problems. Sayles' study of 300 industrial work groups in 30 plants shows, among other things, that differences in the structure of such groups are significant variables which shape the collective behavior of the members. The social system shaped by the technological process is said to be a "basic and continuing determinant of work group attitudes and actions."[29]

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26. Bennett M. Berger, Working-Class Suburb: A Study of Auto Workers in Suburbia, Berkeley: University of California Press, 1960.

27. Goldthorpe, op. cit.

28. Chris Argyris, Personality and Organization, New York: Harper, 1957.

29. Leonard R. Sayles, Behavior of Industrial Work Groups, New York: John Wiley and Sons, 1958, p. 93.

In a recent study, Blauner maintains that technology, division of labor, social organization, and economic structure vary from industry to industry, and that a unique constellation of these four variables in an individual industry accounts for a work environment aht is somewhat special in its impact on the blue-collar labor force.[30] Using the following typology, Blauner compared workers from four different industries and found striking contrasts in the balance of alienation and freedom:

> craft technology (as in printing industry)
> machine-tending technology (as in textile industry)
> assembly-line technology (as in automobile industry)
> continuous-process technology (as in chemical industry)

To some extent the present study begins where Blauner left off. In his final footnote, at the very end of the book, Blauner cautions the reader against treating an entire industry as an undifferentiated unit:[31]

> "One must guard against the weakness of this approach as well as stress its advantages. Just as industrial sociology fosters an undifferentiated view of industry in general and tends to ignore differences among industries, the "sociology of industries" exaggerates the unity of an individual industry and necessarily underplays the important variations within that industry, as well as its similarities to other industries. Our understanding of the conditions and causes of alienation in manual work would also be furthered by an intensive investigation which focused on the variations in worker freedoms and job attitudes among the firms within any one of the four industries I have considered."

This study aims to focus on the variations in technological work environment along esentially the same lines as those suggested by Blauner, but within one industry. Logically the relationships

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30. Blauner (1964), op. cit., pp. 10-11.

31. Ibid., p. 187. See also: p. 7 where the author admits: "Of course, no industry has a completely homogeneous technology."

that Blauner found between the industries should also hold within any one of them, providing of course the existence of the necessary conditions is established. We decided to study an Indian automobile plant because it promised to meet that proviso. The three-fold classification of work environment used in this study closely resembles that used by Blauner. This classification is also similar to that used by Touraine in his study of the Renault automobile plant,[32] and the one used by Warner and Low.[33]

Finally, a few words are in order regarding the choice of an Indian factory for purposes of testing the Industrial Man hypothesis outlined above. Insofar as the immediate aim of the study is to test a sociological hypothesis derived from one society in another, it may be considered as one of the growing number of studies in comparative sociology. Yet, this is not a systematic comparative study in that the Indian data will not be directly compared to other data. The findings of this study will of course be discussed, in a general way, in the light of the empirical evidence obtained through some of the similar studies conducted in the West.

Since this is perhaps as much a case study as a comparative one, we are sensitive to the role of several aspects of the traditional Indian society, which might impinge upon the process of social change being studied. We have, therefore, included in the research design, among others, such factors as religion, caste,

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32. Alain Touraine in Walker, op. cit., p. 427.

33. W. Lloyd Warner and J. O. Low, The Social System of the Modern Factory, New Haven, Conn.: Yale University Press, 1947, p. 86.

rural-urban background, and previous occupational experience. In fact, one of the considerations in favor of choosing India as the research site for the study was the fact that this society provides a sharp contrast to an industrialized (Western) society not only in the level of industrial development but also in terms of its social and cultural organization. As we proceed to analyze the data, we will try to be sensitive to the role of the traditional Indian culture. If it is found, for example, that the work experience of the Indian employee is better explained by caste status rather than occupational status, or by religion and rural-urban background rather than wages and seniority, we will have reason to question the universality of the Industrial Man thesis.

CHAPTER II

THE PROBLEM

The main task of the present study is to examine and specify the relationship between technological work environment and certain attitudes and behavior patterns among the Indian automobile workers. To do this we must: (1) identify within the plant different types of work environment that are sufficiently distinct from one another in terms of technology, (2) ascertain differences in the level of worker satisfaction, and (3) measure actual behavior of workers in some work-related and non-work situations.

As will be shown in the subsequent discussion, technological work environment determines to a large extent the occupational status of the modern industrial worker. Besides wages, the typical rewards that are differentially distributed among factory workers include such things as freedom from strict supervision, freedom of physical movement, an opportunity to use discretion in the execution of work, and the like. It is well known that skilled craftsmen in any factory usually get a lion's share of the above rewards. In the status system of the modern factory, therefore, the skilled craftsmen stand at the very top of the hierarchy and the machine operators and the unskilled, routine manual workers follow in order. Usually, any movement up the factory status ladder requires, among other things, longer periods of occupational socialization which includes such things as knowledge of certain skills, longer seniority and preferably (though not necessarily)

more education. In view of these considerations, we would expect that the higher the occupational status, the greater will be the level of worker satisfaction. Also, we expect that occupational status is positively related to worker's involvement with the affairs of his union, community and the neighborhood. These are our main guiding hypotheses to be specified later.

Occupational Status

Studies of Blauner, Chinoy, Faunce, Inkeles, Walker, Walker and Guest, Woodward, Wyatt, and Marriott, and Zweig clearly show that the way the industrial workers feel about their work experience is affected by their technological work environment.[1] A question may then be asked: why and in what way does technology shape the work experience of these workers? The following discussion attempts to answer this question.

For most of the writers under discussion, "technology" means more than just physical objects. Blauner, for example, defines technology as "the complex of physical objects and technical operations (both manual and machine) regularly employed in turning out the goods and services produced by an industry."[2] This definition parallels that used by Walker in Modern Technology and Civilization.[3] Following this definition, therefore, the technology of an automobile assembly line includes not only the moving conveyor and all

1. Several of these studies have been referred to in the previous chapter.

2. Robert Blauner, Alienation and Freedom: The Factory Worker and His Industry, Chicago: University of Chicago Press, 1964, p. 6.

3. Charles R. Walker, Modern Technology and Civilization, New York: McGraw-Hill, 1962, p. 2.

other "hardware," but also the mass production methods devised by management and practiced by workers to assemble an automobile. In such a definition, scientific management and other kinds of engineering rules which impinge on people are included under the term "technology."

Blauner has shown, through his inter-industry comparison, that it is hazardous to generalize about industrial workers as a homogeneous category. But Deutsch's study of an American automobile plant reveals that it is equally hazardous to treat (as Blauner does) industrial workers of any one industry as a homogenous group.[4] Using essentially Blauner's typology of technological work environment, Deutsch found marked differences in workers' job attitudes and certain behavior patterns within the same plant. Although these two studies differ in their scope, both agree on one point: variations in technological work environment affect the patterns of personal response of industrial workers. Blauner provides the following rationale for the relationship between technology and work experience:[5]

1. Technology, more than any other factor, determines the nature of the job tasks performed by blue-collar employees.

2. The technological setting limits or expands the amount of freedom and control that a worker exercises in his immediate work environment.

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4. Steven E. Deutsch, "Skill Level, Social Involvement and Ideology: A Study of Automobile Workers." Unpublished Ph.D. Dissertation, Department of Sociology, Michigan State University, 1964. In fairness to Blauner it must be pointed out that (as already indicated in the previous chapter) he was fully conscious of intra-industry differences. Apparently, the broad scope of his study prevented him from paying more attention to internal variations within each industry.

5. Blauner (1964), op. cit., p. 8.

3. The machine system largely decides whether the worker can become directly engrossed in the activity of work or whether detachment and monotony more commonly result.

4. Since technological considerations often determine the size of an industrial plant, they markedly influence the social atmosphere and degree of cohesion among the work force. Technology also structures the existence and form of work groups, in this way influencing cohesion.

5. Technology largely determines the occupational structure and skill distribution within an enterprise, the basic factors in advancement opportunities, and normative integration.

After Warner and Low, Touraine, Blauner, and Deutsch we propose to examine the variations in technological work environment in terms of the three-fold classification shown in Fig. 1. Although it is implicit in the classification proposed here, the term "skill" has been deliberately avoided in referring to the three types of work environment. Skill, as Warner and Low point out, is an attribute of a person, although by convention the word is also applied to jobs.[6] The idea of skill involves ability, proficiency, or expertness, which are attributes of an individual.[7] Hence, the use of the term "skill" as an attribute of a job may be confusing. And the possibility of such confusion is enhanced when the term is applied to a broad group of work activities as proposed in the present study. There is yet another reason for not using skill in referring to the various technological work environments. For a variety of reasons, there is no necessary correspondence between

6. W. Lloyd Warner and J. O. Low, The Social System of the Modern Factory, New Haven, Conn.: Yale University Press, 1947, p. 73.

7. Webster's New World Dictionary of the American Language, College Edition, Cleveland: The World Publishing Company, 1966, p. 1366.

Fig. 1. A typology of variations in technological work environment within an industrial enterprise

Author	I	II	III	IV
Warner and Low (1947)	Tool Using (High Skill)	Machine Operating (Medium Skill	Object Handling (Low Skill)	- -
Alain Touraine (1955)	Phase A (old) Skilled Craftsmen	Phase B (transition) Feeding of Machines by Unskilled Workmen		Phase C Automation
Robert Blauner (1964)	Craft Technology	Machine Technology	Assembly-Line Technology	Continuous-Process Technology
Steven E. Deutsch (1964)	Skilled Craftsmen	Semiskilled Machine Operators	Unskilled Assemblers	- -
		OCCUPATIONAL STATUS		
Proposed for the present study	High (Craftsmen)	Medium (Machine Operators)	Low (Routine Manual Workers)	- -

the actual activities of an industrial worker and his skill designation as assigned to him by the enterprise. As Form has shown, skill classification in different societies is subject to peculiar local conditions.[8] A machine-tending worker or an assembler, for example, might be classified as a "skilled" worker in view of his seniority or some other reasons, and, conversely, a draftsman working in a tool room might be designated as a "semi-skilled" worker.

The three-fold typology suggested for this study is based on the degree of "control" that the worker exercises over the technological process. According to Warner and Low, the industrial worker in each technique exerts his control over objects and materials.[9] The routine manual worker ("low" occupational status) controls materials with his hands alone; the machine operator ("medium" status), too, guides materials to the machine with his hands, but he also uses certian tools to regulate and adjust the machine; and, finally, the craftsman ("high" status) controls materials with the aid of tools which he manipulates.

The idea of worker's control over his work environment is perhaps best developed by Blauner who sees it as an aspect of autonomy or freedom. According to Blauner, the following five interrelated aspects of freedom together make up control over the immediate work process: (1) control over work pace, and (2) freedom from pressure.[10]

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8. William H. Form, "A Cross-Cultural Exploration of a Crucial Concept: Skill Level," Unpublished manuscript, 1966.

9. Warner and Low, op. cit., p. 67.

10. Robert Blauner, "Work Satisfaction and Industrial Trends in Modern Society," in W. Galenson and S. M. Lipset (eds.), Labor and Trade Unionism, New York: John Wiley and Sons, 1960.

3. Freedom of physical movement
4. Ability to control the quantity and quality of production
5. Ability to choose the technique of work

Blauner admits that the notion of control in work is a vague, sensitizing concept which covers a wide range of phenomena rather than a concept which is precisely delimited and identifiable by precise idicators, The occupational status of each worker we interviewed was determined largely on the basis of Blauner's conceptualization of "control." In addition to the job descriptions obtained from each worker, I personally observed their work behavior during my eight months' stay in the factory. The occupational status as used in this study, therefore, is based primarily on the type of work actually done by the worker.

In addition to the classification of each worker with reference to actual functions, his occupational status was also determined by the department or shop he worked in. For this purpose, the fifteen departments of the plant that we studied were grouped into three broad categories:

<u>High Status "Craft or Repair" Departments</u>

1. Tool Room
2. Cutter Grinding
3. Assembly Repairs

<u>Medium Status "Manufacturing" Departments</u>

4. Axle and Transmission
5. Machine Shop
6. Motor Production
7. Propeller Shaft
8. Shock Absorber
9. Trim Application

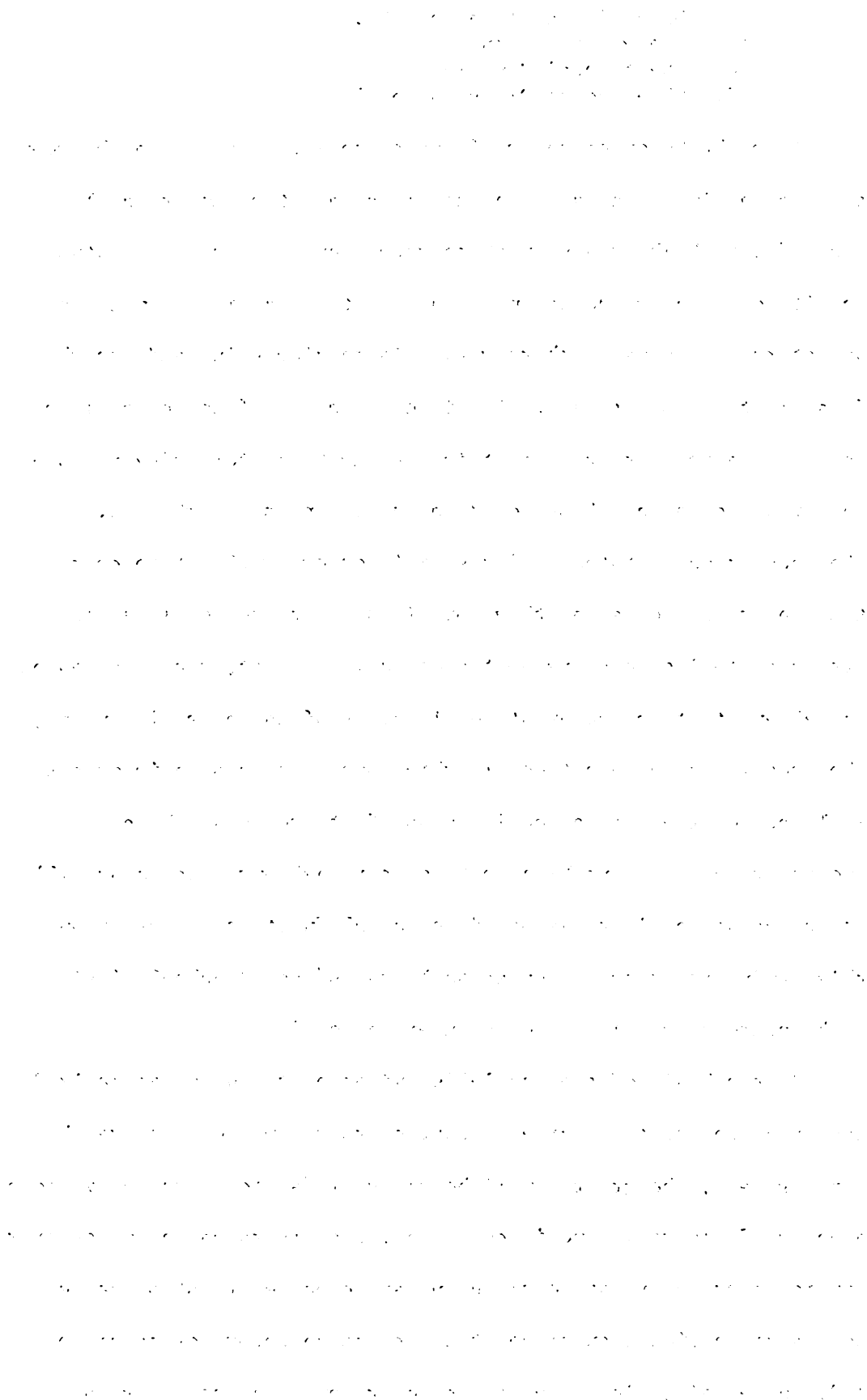
<u>Low Status "Routine Manual Work" Departments</u>

10. Assembly Line
11. General Heat Treatment No. 1

12. General Heat Treatment No. 2
13. Heavy Press Shop
14. Sheet Metal Division No. 2
15. Sheet Metal Division No. 3

As might be expected, we found a considerable overlap between the two ranking methods - the functional and the departmental. Most of the "high" status workers were found in the high status "craft" or "repair" deparments, just as the majority of machine operators and manual workers worked in manufacturing and assembly departments, respectively. But in each case we found exceptions to this general pattern, and this was the basis for using the second ranking device, based on department a person worked in. The occupational status of industrial workers with reference to the departments or shops they work in has not been employed in previous studies in a systematic manner. And yet, there is reason to believe that in the prestige hierarchy of an industrial plant, the prestige of a department in which one works has an important influence on the occupational status of its members. Hence, we propose to use both ranking methods, although our main focus will be on occupational status based on actual functions. Throughout this study, the terms "occupational status" and "technological work environment" will be used interchangeably.

On the basis of the available evidence it can be generalized that the greater the degree of control that a worker has over his work process, the greater will be his satisfaction with the various aspects of his work experience. Thus, the craftsmen having greater control over their work environment are expected to show greater work satisfaction than either the machine operators or assemblers. And, conversely, since the machine operators and assemblers are



largely engaged in standardized tasks, and thus have relatively little control in work, they are expected to feel "powerless" and, therefore, dissatisfied with their work experience. We also expect that work satisfaction affects, in a positive way, the actual behavior and involvement of workers in their occupational and social activities. These, then, are our major hypotheses to be pursued in this study.

Both Blauner's comparative study of four industries and Deutsch's study of theOldsmobile workers in Lansing, Michigan leand support to our general hypotheses. We expect that the relationships between technology, as manifested in occupational status of a worker, and work experience, as found among the Oldsmobile workers, will also hold for the Indian automobile workers despite enormous differences in the level of development and other sociocultural factors in the two communities and societies.

In the absence of any systematic cross-national studies in which at least one of the countries studied is at an early stage of industrial development, it is hard to justify the proposed hypotheses through empirical evidence. The study that comes close to such an approach is that of Lambert, who showed that the suggested relationship between occupational status and satisfaction might not hold cross-culturally.[11] However, we have reason to question the definition of "skill" as a measure of occupational status which he used to rank the Poona workers. Lambert's definition of skill is based exclusively on "wage slabs." Also, Poona, with a population

11. Richard D. Lambert, Workers, Factories, and Social Change in India, Princeton, New Jersey: Princeton University Press, 1963, p. 213.

of three-quarters of a million, is one of the more traditional cities of India. Unlike Greater Bombay (the largest city of India with a population of over four million), Poona is not a center of commerce and industry. We expect, therefore, that the urban-industrial eontext of Greater Bombay is critical in shaping the work life of the Indian industrial worker.

Additional Independent Variables

Control of work, as reflected in the three-fold typology proposed in this study, is of course not independent of other factors. For instance, Deutsch found that skilled tradesmen (in contrast to production workers) are older, have more seniority, and are better educated if younger.[12] Form and Geschwender found a positive correlation between job satisfaction and such characteristics as marital status, number of children, age, seniority, wages, and skill.[13] Apparently, many of these variables are interrelated through some common variable like age. We propose to use in this study several demographic, background, and occupational variables in order to determine their effect (individually as well as collectively) on worker satisfaction. The relative importance of each such variable vis-a-vis occupational status will then be examined through multivariate analysis.

We expect age, seniority, wages, level of education, occupational background, and rural-urban background to be related to

12. Deutsch, op. cit.

13. William H. Form and James A. Geschwender, "Social Reference Basis of Job Satisfaction: The Case of Manual Workers," American Sociological Review, 27 (April, 1962), pp. 235-236.

occupational status. Thus, the workers in high status jobs (in contrast to those in lower status jobs) are expected to be older, better educated, drawn largely from non-agricultural occupational background, having more seniority, drawing higher wages, and from urban background. Although these six variables may be interrelated, their clustering around the major independent variable (if supported by our data) would be of great significance. Such a finding will, among other things, support the notion that a large industry with advanced technology functions largely in terms of universalistic principles and rational criteria. In order to test this notion further, we propose to examine the relationship between occupational status and such additional background factors as religion, caste, marital status, and number of children in the family. If the particularistic tradition of the Indian society were to take precedence over the rationalized processes of modern industry, we would expect the high status occupational positions in the factory to be manned by Hindus and, among Hindus, by the members of upper castes. Likewise, in an age-graded society like India, marital status and number of children a worker has should affect his chances of obtaining a high-status job in the factory.

But, in keeping with our Industrial Man perspective, we expect that in a large and highly complex automobile factory, located as it is in a metropolitan city of India, factors like religion, caste, marital status, and number of children would be least relevant in the recruitment and promotion of workers for the various positions. The interrelationships of all the independent variables, including occupational status, will be discussed in Chapter III.

Dependent Variables and Hypotheses

Two classes of phenomena are proposed as dependent variables for this study: (1) attitudes concerning work satisfaction, and (2) certain aspects of worker behavior. We expect to be able to predict both work satisfaction and the selected behavior patterns on the basis of his occupational status in the factory.

(1) Work Satisfaction

The use of the concept "job satisfaction" during the previous half century shows a variety of usages or meanings:

1. an overall liking for one's occupation as well as the job and factors related to work (usually measured through a direct question or two);

2. a composite index based on a number of items forming a scale of job satisfaction; and

3. making a distinction between occupational satisfaction, job satisfaction, and work satisfaction (used separately or in combination).

Hoppock and other early students of job satisfaction treated job satisfaction as a unitary concept referring to a state of mind and having no reference to a discrete range of work situations. The present study, however, assumes that work satisfaction is not an overall feeling, but a cluster of attitudes and feelings concerning a wide range of work situations.

To cite just one example in support of this position, Goldthorpe reports that dislike for unsatisfying work tasks can co-exist with appreciation of a firm which is felt by its employees to meet their economic wants and expectations better than would most others.[14]

14. John H. Goldthorpe, "Attitudes and Behavior of Car Assembly Workers: A Deviant Case and a Theoretical Critique," The British Journal of Sociology, 17 (September, 1966), pp. 237-238.

But regardless of which approach is used to study work satisfaction, there still remains the important methodological problem of how to measure the nebulous phenomena to which the concept refers. Despite its obvious weaknesses we shall rely on the verbal responses of workers to both direct and indirect questions. The data on work satisfaction will thus be based on the personal evaluations by workers of their work experience. The following "areas" of work satisfaction have been chosen in order to examine the relationship between each of these and the independent variables:

1. Situs Satisfaction
2. Satisfaction with the Company
3. Occupational Satisfaction
4. Occupational Aspirations
5. Job Satisfaction

Situs Satisfaction:

Social scientists usually divide the economic system into three sectors: the primary sector (agriculture), the secondary sector (industry), and the tertiary sector (commerce and services). Some writers argue that the industrial worker's desire to work as a small independent farmer, or in commerce and services, reflects his dissatisfaction with his present sector of employment. Thus, according to Chinoy, the American automobile worker's desire to become a small businessman or an independent farmer some day is seen as an index of his dissatisfaction with the industrial sector.[15]

15. Ely Chinoy, Automobile Workers and the American Dream, Garden City, New York: Doubleday and Company, 1955.

During the recent years, many social scientists have shown interest in examining the role of labor force commitment in economic development.[16] One of the ways through which labor force commitment is measured is to see whether the worker has severed his ties with his rural or tribal roots, and has made the city his permanent home.[17] It is argued that the continuing connections of industrial workers with their rural and agricultural background hinder the emergence of a committed labor force which, in turn, accounts for the low level of economic development of a society. Although more research is needed to test this notion, the little available evidence shows that the lack of labor force commitment in developing societies has been grossly exaggerated. Lambert, for example, points out that if we view commitment as the intention to remain in factory employment, more than three-fourths of the Indian workers are committed.[18] Rather than viewing labor force commitment as the general response of an entire society, we suggest that it is perhaps more meaningful to study the different degrees of commitment in a given social system. In the present study, we expect that the commitment of the Premier workers to their sector of employment (situs) can be predicted on the basis of a knowledge of their occupational status.

16. For an excellent compendium of research and opinion on this subject, see Wilbert E. Moore and Arnold S. Feldman (eds.), Labor Commitment and Social Change in Developing Areas, New York: Social Science Research Council, 1960.

17. Clark Kerr, "Changing Social Structure," in Moore and Feldman, op. cit.

18. Lambert, op. cit., p. 84.

Satisfaction with the Company:

The next area proposed to be studied is worker's satisfaction with his present employers, the company. As already observed, the automobile industry is generally regarded as the locus classicus of worker alienation, which is reflected in his dissatisfaction with the various aspects of occupational experience. It is argued that the automobile worker lacks commitment to the company which is manifested in his persistent sense of grievance and in his erratic and often disruptive behavior in the industrial relations field.

The Indian automobile industry is of recent origin. But, both in view of its advanced technology and the product that it manufactures, it is one of the best-paying and high-prestige industries in the country. We would, therefore, expect that, regardless of how the workers felt about their work experience, their level of satisfaction with the firm would be generally high. However, we do not expect satisfaction with the firm to be independent of occupational status within the factory. Since differences in occupational status (as used here) follow essentially the same typology as that used by Blauner and others, we expect that among the Indian workers, too, occupational status is positively related to satisfaction with the company.

Occupational Satisfaction and Job Satisfaction:

The last two areas of work experience, the occupation and the job, are probably the most critical in any study of job satisfaction. It is as an incumbent of a particular job and as a member of a given occupation that the industrial worker experiences the joys or frustrations of his daily work. Since lines between

occupation and job are often blurred, many students of job satisfaction fail to make a distinction between the two. We prefer to treat the two areas separately by defining "job" as a specific aspect of the more general concept "occupation." Thus, a skilled worker (an occupational status) may hold such jobs as die-or-model-maker in the tool room, machine-setter or repairman in a production shop, or inspector or mechanic in the final assembly department.

In addition to making a distinction between job and occupation, we also propose to examine occupational aspirations as an indirect manifestation of satisfaction or dissatisfaction with the present occupation. It is expected that occupational status is positively related to each of the three areas: occupational satisfaction, occupational aspirations, and job satisfaction.

(2) Worker Behavior

Implicit in all research on job satisfaction is the notion that work satisfaction is somehow related to employee performance, as manifested in his involvement in work. And industrial management usually goes a step farther in assuming that job satisfaction is related to worker efficiency, thereby contributing to increased productivity. Since these two assumptions are the raison d'etre of much research on job satisfaction we should expect some studies to focus on the relationship between job satisfaction and occupational behavior. But curiously this task has not received the attention it deserves. To the few studies that do investigate the relationship between job attitudes and certain aspects of worker behavior, we add the present study. The following aspects of worker behavior have been selected for this prupose: (1) attendance

at work, (2) union involvement, (3) neighborhood involvement, and (4) community involvement.

Attendance at Work:

Of close to two thousand studies on job attitudes reviewed by Herzberg and his callaborators, only thirteen examined the relationship between job satisfaction and absenteeism. In twelve of those studies, data were presented to show that workers with negative job attitudes tend to have high rates of absenteeism.[19] Since work satisfaction is expected to be a function of occupational status, we anticipate that work attendance would be positively related to occupational status.

Union Involvement:

At least two aspects of workers' involvement in union activities will be examined: interest in unions in general and participation in union activities. Of the many areas of work experience discussed so far, union behavior is perhaps most unique and thus least comparable to the American scene. The peculiarity of the Indian social and cultural context is most pronounced in this case. In a big industry with highly rationalized production system, we would expect to find a strong and active trade union. But the Indian labor scene being marked by rival unions and in the absence of collective bargaining, a strong interest to join a union is still lacking among the rank and file. There is no limit to the number of unions that a factory may have; union

19. Frederick Herzberg et al., Job Attitudes: Review of Research and Opinion, Pittsburgh, Pa.: Psychological Service of Pittsburgh, 1957, p. 105.

membership is not compulsory; no arrangements exist for "checkoff" of union dues; heterogeneity of the labor force in such matters as religion, language, regional background, and level of education - these are some of the factors that inhibit active union involvement in India.[20]

The top union leaders in India (as in many other developing countries) are often an educated elite - "outsiders" who have had little factory work experience. As observed in a recent report, union organizations in developing countries "appear to be all head and no body. The men who stand at the top are self-appointed spokesmen for a membership which is only partly committed."[21] Although the structural features of Indian unionism are quite dissimilar to those of its American counterpart, a rather low degree of union participation is reported for both countries.[22] Studies of the American worker show that skilled tradesmen (in contrast to the semi-skilled and unskilled workers) tend to have greater union interest and participation.[23] We expect similar relationship to hold among the Indian automobile workers.

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20. For a good review of trade unionism in India, see Charles A. Myers, Labor Problems in the Industrialization of India, Cambridge, Mass.: Harvard University Press, 1958; Oscar A. Ornati, Jobs and Workers in India, Ithaca, New York: The Institute of International Industrial and Labor Relations, 1955; and Subhiah Kannappan, "The Gandhian Model of Unionism in a Developing Economy: The TLA in India," Industrial and Labor Relations Review, 16, 1 (October, 1962), pp. 86-110.

21. "Labor Unions and Politics in the Developing Countries," Washington, D.C.: Brookings Institution, Research Report No. 11, n.d.

22. Joel Seidman et al., The Worker Views His Union, Chicago, Ill.: University of Chicago Press, 1958, pp. 199-200.

23. Deutsch, op. cit., pp. 65-66.

Neighborhood and Community Involvement:

Involvement in the affairs of one's neighborhood and community are the remaining two areas of worker behavior to be investigated in this study. Here again, we expect occupational status to be positively related to both community involvement and neighborhood involvement. This assumption is based on the fact that occupational status is a composite index of a person's income, level of education, age, and other attributes. And, as is well known, participation in the affairs of one's community and neighborhood is closely related to socio-economic status. Thus, Deutsch found that the production workers (in contrast to the skilled craftsmen) participated less in neighborhood and community activities.[24]

Concerning the industrial community, Kerr and his associates write:

> New relationships based upon employment or occupation come to replace the larger family and village attachments. New methods of communication among city dwellers - newspapers and radio - replace those of the village. The role of the extended family as a source of security and an object of loyalty is weakened and its place is taken in some measure by the governments of the city and nationalist state."[25]

Since movement up the occupational status ladder within a factory generally means longer exposure to the urban-industrial experience, we would expect that the craftsmen (in contrast to the machine operators and routine manual workers) have organized their social relationships within the neighborhood and the community along the

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24. Ibid.

25. Clark Kerr et al., Industrialism and Industrial Man: The Problem of Labor and Management in Economic Growth, New York: Oxford University Press, 1964, p. 171.

lines suggested by Kerr and associates. To the extent that this is true, we expect that the higher the occupational status of a worker, the greater will be his involvement in both his community and the neighborhood.

Summary of Hypotheses:

In the latter half of this chapter we have discussed and specified a number of hypotheses that are proposed to be tested through this study. These hypotheses are summarized below:

Occupational status is positively related to each of the following "areas" of worker satisfaction and behavior:

1. Situs Satisfaction
2. Satisfaction with the Company
3. Satisfaction with the present Occupation
4. Occupational Aspirations
5. Job Satisfaction
6. Attendance at Work
7. Union Involvement
8. Neighborhood Involvement
9. Community Involvement

In addition to the bivariate analysis of data involved in testing the above hypotheses, we propose to introduce (as already indicated) a number of other independent variables as "intervening" or "control" variables. Partly due to the limitations placed by small sample size, and also in view of the nature of our data, the multivariate analysis to be attempted in this study will involve only trivariate tables in which, for example, variable X will be cross-tabulated against variable Y, holding variable Z constant. The third-dimension variables to be used for this type of analysis are listed below:

1. Rural-Urban Background
2. Religion
3. Caste
4. Education

5. Age
6. Marital Status
7. Number of Children
8. Seniority
9. Wages
10. Occupational Background

Our interest in the above "control" factors is only indirect. As some of these factors are expected to be related to occupational status, they are also likely to be associated with some of the dependent variables to be investigated. It is hoped that in such cases, after controlling for the third factor, we will be able to determine the relative importance of occupational status in influencing worker satisfaction and behavior. The reasons for including such variables as religion and caste may be found toward the end of the first chapter.

Sample Design and Data Collection

We are interested in studying only those industrial workers who are directly working at machine technology for the manufacture or assembly of automobiles or parts thereof. The population thus defined automatically excluded managerial, supervisory, and clerical workers of the factory. Also excluded were those industrial workers who were working in such non-production departments as Canteen, Construction, Material Handling, Sales, Salvage, Sanitation, Service, Stores, Traffic, and the like. The total strength of daily-rated, industrial workers at the plant, at the time of this study, was 5,725. Excluding the non-production departments mentioned above (which had a total strength of 1,849) we had 28 departments with a total strength of 3,876 (or, two-thirds of the total work force). Those 3,876 production workers constitute our "population" for purposes of this study.

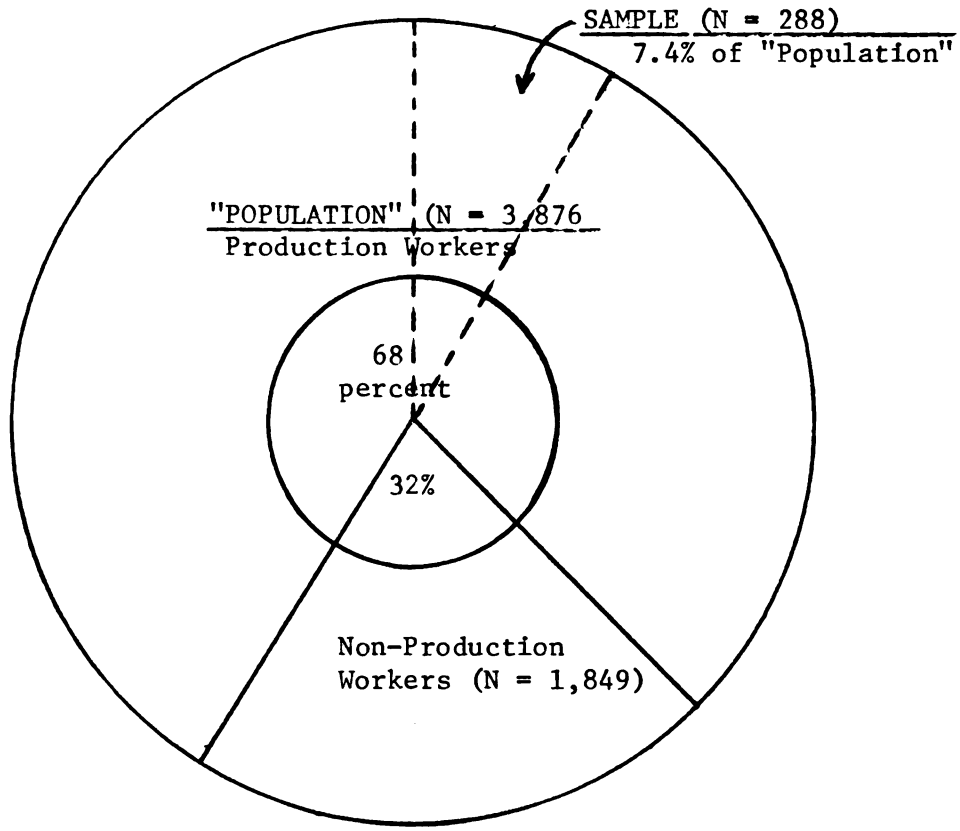
We decided to select a stratified random sample of about 300 workers from the population. The chief criterion for stratifying the population was "skill level," the records for which were made available to us by the firm. However, it was discovered that skill designations as assigned by the company were not reliable for our purposes. We found, for example, that no less than two-thirds of the workers on the final assembly line had been classified as "skilled" workers whereas, conversely, the proportions of "semi-skilled" and "unskilled" workers on the final assembly line were only 29 percent and 5 percent, respectively!

We then decided to go through the various departments of the factory to carefully observe and identify the various technological work environments. This was done, and after several such visits, we selected fifteen (out of 28) departments which seemed to represent a cross-section of the population under study. The total work force in those fifteen departments was 2,323 (or, three-fifths of the "population"). Next, by using tables of random numbers, we chose a "simple random sample" equal to ten percent of the strength of the fifteen departments. In view of the analytical requirements of this study, we then over-sampled the assembly-line workers. This was done simply by including <u>all</u> the assemblers in the car assembly line department in our sample.

Through the procedure outlined above, we obtained 288 names, which represented twelve percent of the total work force in the fifteen selected departments of the factory, and seven percent of the work force considered to be our "population." The following figure will help describe the sample size in relation to the

population as well as the total strength of industrial workers in the factory.

Figure 2. The sample size in relation to the population and the total strength of industrial workers in the factory.



All factory workers (daily-rated only) = 5,725

Of the 288 workers selected for interviewing, 262 (or, 91 percent) were interviewed. Of the 26 workers not interviewed, nine refused to be interviewed while the other seventeen could not be reached as they were either sick, on long leave, or already discharged from factory employment.

Data for the study were gathered through intensive interviews with 262 workers. These interviews were conducted on the factory premises with the approval of both the management and the unions. The chief investigator (Sharma) was assisted by two interviewers (Dighe and Kinikar). The workers in most cases were interviewed in their mother tongues which happened to be one of the following six languages: Marathi, Hindi, Urdu, Gujarati, Punjabi, and English. It took on the average three hours to complete each interview.

The entire working force of the factory under study is male and, therefore, the sample consists of all-male workers. Also, every one in the sample has at least one year's seniority in Premier. After the stratified random sample was selected from the total factory population, in the manner discribed above, and after 262 interviews had been completed, we were in a position to compare the characteristics of workers in the sample with those of the total factory population along certain dimensions. In the course of this study, we discovered that the factory administration had conducted a survey in which they collected data about the work force, as on December 31, 1964, along certian dimensions such as age, seniority, etc. These data were gathered from the official employment records for each of the close to six thousand workers instead of using a simple random sample. Such data are rarely available to social scientists and, therefore, we felt quite jubilant at the opportunity of being able to find out whether our sample was in fact representative of the population under study.

A comparison of the characteristics of the sample workers vis-a-vis total factory population (along some of the dimensions

mentioned above) is shown in Appendix A. This comparison revealed that with minor exceptions the sample generally represents the total factory population. Thus, the stratified random sample selected for this study not only satisfies the analytical demands of the research design, but also represents the population from which it was drawn. The conclusions and generalizations to be made in the analysis of the data has relevance not only for the 262 workers interviewed but also for the factory population of industrial workers.

CHAPTER III

THE FACTORY

Before examining the role of occupational status, our major independent variable, in shaping the attitudes and behavior of automobile workers it seems appropriate to discuss the characteristics of the work force under study. The present chapter is designed to do this with at least two things in mind: first, to describe the distribution of workers in terms of several demographic characteristics and, second, to examine the inter-relationships of all independent variables which we propose to use as "control" variables in the following chapters. In the process of doing this we hope to derive a series of "profiles" of the Premier worker. But first, let us look at the brief history of industrial development in India and its relation to the Indian automobile industry.

The Indian Automobile Industry

The origins of modern industry in India can be traced back to the middle of the nineteenth century when industries like cotton, jute, coal, and rails were first established. But for half a century (that is, until the establishment of Tata iron and steel works in 1911), the industrial growth in India remained confined to the already established four industries.[1] The almost complete lack of organized industry in light engineering up to the late 1930's is attributed by some writers to the British pre-war policy, particularly its refusal to protect

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1. Charles A. Myers, Labor Problems in the Industrialization of India, Cambridge, Mass.: Harvard University Press, 1958, p. 14.

infant industry and the policy of buying all government stores in England.[2] The diversified industrial growth thus had to wait until World War II and independence in 1947. Myers sums up the consequences of this shift of emphasis from the older industries to the more recently established ones:[3]

> From 1946 to 1953, jute, and cotton textiles, and the coal industry, increased capacity less than 25 per cent. In the same period capacity for production of electric lamps, batteries, motors, transformers and fans, radios, sewing machines, diesel engines, cement and bicycles was increased over 100 per cent. The same trend is apparent in output statistics. From 1946 to 1955 the output of coal, steel, cotton, and jute textiles increased one third or less; but among, for example, chemicals, cement, sewing machines, and the general engineering catagory, no increase was less than 170 percent.

After independence, therefore, India experienced not only rapid industrial growth but also the diversification of her industrial structure.

Some writers have suggested that the Gandhian philosophy and certain aspects of the Hindu social structure are not congruent with the development of industrial organization in India. Gandhi believed, for instance, that "industrialism" was responsible for a host of evils; among the gravest were unemployment, destruction of the village unit, and the concentration of wealth in the hands of the few. Admittedly some machinery would, as a practical matter, have to stay, but these machines must be subordinated to man and his requirements, serving him and not he them.[4] Although the Indian government (at least the ruling Congress party) has been loyal to Gandhi's teachings in some other ways, its economic policies clearly depart from the Gandhian thinking

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2. Ibid., p. 16.

3. Ibid., p. 18.

4. Ibid., p. 32.

outlined above. Hence, today it is industrialization, not the village handicraft economy, that is the primary goal of the Indian government.

The automobile factory selected for this study is one of the two Indian enterprises in the private sector which laid the foundation, in the late 1940's, for the indigenous automobile industry.[5] Prior to this, however, there were three assembly plants, one each in Bombay, Calcutta, and Madras, which began to operate in the late 1920's as subsidiaries of General Motors, G. Mackenzie and Company, and Ford Motor Company, respectively. The automobile industry in India, therefore, is at least forty years old. After independence, the government allowed only those firms which had a "manufacturing" program to continue producing vehicles. As a result of this, the three old assembly plants were closed down. Today there are at least six factories, all in the private sector, which are engaged in the manufacture and assembly of various types of vehicles, e.g., cars, jeeps, trucks, and buses. According to the latest information available, the total production of the entire industry rose by 69 percent during the five years ending 1961. And yet, the combined annual production of the six plants was only 54,312 units in 1961, which is much below the potential demand in a country of over 400 million inhabitants.

During the forty years since the establishment of the first assembly plant in India, a number of automobile ancillary industries have come into existence. The agencies for distribution of vehicles, the repair and service shops, the tire and battery industries, the manufacture of body panels for commercial vehicles, are just a few of

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5. India: Handbook of Commercial Information, Calcutta: Department of Commercial Intelligence and Statistics, Government of India, 1963, pp. 108-128. The following account of the Indian automobile industry draws heavily from this source.

the ancillary industries which are rapidly growing in India. In addition, the indigenous iron and steel, non-ferrous metal and paint industries have come into being in order to meet the needs for raw material for the automobile industry. The industry itself generally produces only the major components and buys from the ancillary industry parts and accessories worth more than half of the total ex-works price of the complete vehicle. As the Indian government further restrict imports, the ancillary industry will develop in the near future at an even faster rate than the automobile industry itself.

According to the latest available information, there are 58 factories engaged in the manufacture of motor vehicles, or parts thereof, excluding the "repair" industry.[6] The total work force employed by these 58 factories was 48,812 in 1960 out of which 40,447 (or, 83 percent) were called "workers" while the remaining as persons other than workers.[7] The proportion of women in the work force is less than one percent for the nation, and almost nil in the state of Maharashtra. There is no female worker in the factory under study. Most of the workers are hired directly by the automobile industry; the proportion of those hired through contractors is nine percent for the nation and six percent for the state of Maharashtra.

The state of Maharashtra, of which Bombay is the capital, alone accounts for one-third of the number of factories, the number of workers, and the output of manufactured goods in the Indian automobile industry. Maharashtra is also the most industrialized as well as the most urbanized among all Indian states. Whereas the population of

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6. Annual Survey of Industries - 1960, Vol. IX, Government of India, p. 112.

7. Ibid., p. 114.

Maharashtra constitutes only nine percent of the total Indian population, one-sixth of all factories and one-fifth of all factory workers are located in Maharashtra. Similarly, whereas the all-India proportion of urban population is 18 percent, Maharashtra leads all states with an urban population of 28 percent. And, finally, the average per capita annual earnings of employees in manufacturing industries for Maharashtra exceed the national average by Rupees 200 to 300.

The Indian automobile industry enjoys tariff protection through restriction of import of built-up vehicles, which is designed to step-up the manufacture of indigenous parts for the vehicles. For the plant under study the manufacture of the indigenous content had already reached close to 85 percent for the passenger car. It is expected that when the entire vehicle can be manufactured in India with indigenous parts, the total production will rise considerably. Meanwhile, the industry is subject of strict regulation and control by the Indian government.

The factory under study was incorporated in June, 1944 with the object of assembling and, ultimately, manufacturing automobiles. It entered into collaboration with Chrysler Corporation of the United States (for trucks) and with Fiat Società Per Azioni of Italy (for passenger cars). The factory was installed with a press shop, a machine shop and a forge shop. The assembly operations commenced in the factory in 1947 and the manufacture of certain sheet metal components was taken up in 1949. By 1956 the factory had made appreciable progress in the manufacture of engine, gear box and other components for both cars and trucks.

The daily output of the factory in terms of complete vehicles is forty units. Only one-third of this output is passenger car while

the remaining are commercial vehicles.[8] Like the other automobile plants in the country, the Bombay plant is operating at a level much below its capacity. This fact has some important consequences for the work organization in the plant. For example, even on the final assembly line (which is notorious for its conveyor-belt technology) I did not find people working at a rapid pace. In fact, there was no mechanically-paced, moving line for the assembly work. But, then, the pace of work throughout the factory reflected more or less a similar, unhurried pattern. The daily output by an individual worker was regulated by mutually accepted, written schedules of production and not by some mechanical devices.

Since the factory started out as an assembly plant, most of the workers hired during the first few years of its operations possessed little or no skills. Only a relatively small core of mechanics and maintenance workers were required during the early stages of production process. As the plant began to manufacture some of the components a shift in the hiring of workers seems to have taken place. Whereas the workers hired earlier needed little or no previous experience in industrial-manufacturing occupations, the workers who were hired subsequently to man the production machines were selectively drawn from the industrial-manufacturing sector. The typical worker of the first phase of operations in Premier was an "assembler" whereas his counterpart recruited in the fifties and the sixties is a "machine operator." These two types of workers differ from each

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8. Compare this rate of production with that, for example, of the Oldsmobile plant in Lansing, Michigan where one automobile comes off the assembly line every 40 seconds, that is, at the rate of 90 units per hour.

other not only in terms of their work tasks but also, and even more significantly, in terms of their social and occupational background. The expansion program in Premier is still in progress. Only recently the factory has established a large stamping plant of its own at a site removed from the old site by some twenty miles.

An additional factor has contributed to the hiring of better educated and experienced workers in Premier during the recent years. During the post-independence years the government of India have established a number of technical schools in the country which train young men in the various trades required by the developing industries. The minimum requirement for admission to such schools is usually high school education. When these young men compete for jobs in industry with older persons who had less education and no formal technical training, the former are usually preferred for recruitment. The more recently recruited workers in Premier are younger and have more education than their predecessors.

Background and Other Demographic Characteristics

The following discussion is intended to shed some more light on the characteristics of the work force under study. First, we will describe the distribution of workers along each of the several dimensions and, next, an attempt will be made to examine the interrelationships of the various dimensions.

Most of the Premier workers come from non-agricultural families. Only one-half of the grandfathers and one-third of the fathers of these workers were engaged in agricultural occupations, which is quite low in a country like India where even today over three-fourths of the population depends upon agriculture for a living.

Most of the fathers had some education; only one-third are reported to have had no education at all. In the Census of 1961, one-fourth of the total Indian population is described as literate, and compared to this proportion the literacy rate among the fathers of Premier workers (which is 68 percent) is remarkably high. The fathers had had, on the average, four grades of education.

Three-fourths of the fathers were born in rural places. But when we consider their educational and occupational background, we strongly suspect that many of them moved out of the villages and into urban places. This is confirmed, at least in part, by the fact that only about one-half of the Premier workers (as against three-fourths of their fathers) were born in rural areas. Only two-tenths of the total Indian population is classified as "urban" according to the Census of 1961. Although the state of Maharashtra (of which Bombay is the capital) claims three-tenths of her population to be urban, the proportion of urban-born workers in Premier (which is 47 percent) is still quite high.

India is a land of many religions and almost every religion of the world is represented there. The majority of the population, however, belongs to Hinduism which accounts for 84 percent of the total population. A slightly higher proportion of other religious groups are to be found in cities and, thus, the proportion of Hindus in Greater Bombay is only 72 percent. The religious composition of the Premier work force roughly corresponds to the population of Greater Bombay; 69 percent of these workers are Hindus.

As "caste" has since been dropped from the Indian Census as well as in other official records, we have no information on the

caste composition of the population, either at the national level or for Greater Bombay. Thus, it is not possible to compare the factory work force with the outside world. The distribution of Hindu workers in Premier in terms of "caste" is below:[9]

Brahmin . . .	26%
Maratha . . .	41
Artisan . . .	7
Servant . . .	26
Total . . .	100%

Of the above four groups of castes, the Artisan castes perhaps come closest to the type of work done in a modern factory. And yet, only 7 percent of the Premier workers belong to Artisan castes, which suggests that traditional caste status neither encourages nor discourages people from joining modern factory work. The ratio of workers from the upper two caste groups to those from the lower two is 2 to 1.

Only one-thnth of the workers we studied had no education, while the median education for the sample was six grades, which is quite high compared to the fact that only one-fourth of the total Indian population are literate. Almost two-tenths of the workers had completed high school and a few had even attended college.

Like the population of Greater Bombay, the work force of Premier is drawn from various regions of the country, both far and wide. About two-thirds of the workers come from Maharashtra (including one-quarter who were born in Bombay itself). Another one-fifth are drawn from the adjoining states of Gujarat, Madhya Pradesh and Mysore, and

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9. The Brahmins (and in fact every other caste group) referred to in this study are an all-India category, that is, varna and not a localized, endogamous jati. As an all-India varna, each caste group refers to a congeries of jatis which differ from each other in language, diet, dress, occupation and style of life.

the union territory of Goa while the remaining workers come from the North (11 percent) and the South (3 percent). Although most workers speak the local language, Marathi, there are at least as many other languages spoken by the workers as there are the regions of the country they come from.

Before entering premier, the average worker had had about five years' occupational experience in about four different jobs. The present job in Premier is a first job for only one-tenth of the work force. For those who had past experience, the most common sector of employment was industrial-manufacturing, including small specialty shops. The distribution of workers in terms of occupational background is below:

Industrial-Manufacturing (including small specialty shops)	47%
Premier is the first job	11
Business and Services	28
Agriculture	14
Total	100%

For most of the workers with previous experience, their occupational history shows that on the whole they are upwardly mobile persons. The proportion of those whose occupational mobility can be described as "steady up" or "flactuating up" is more than one-half, compared to one-tenth of the "steady down" or "fluctuating down" types.

The average length of service in Premier is eight years. Over one-third of the workers have been in Premier for more than ten years, including some who have been with the firm from its very inception in 1947. When we add to this the previous experience of the workers, we find that the average worker has had a total of thirteen years' occupational experience, in at least five jobs.

The automobile industry in India is among the best paying. The average income of the workers we studied was Rupees 234 per month, exclusive of over-time payments and fringe benefits but inclusive of dearness allowance, which constitutes a substantial part of the total monthly earnings. Compared to the per capita income for the nation as a whole, or the average earnings of factory workers in general, the wages of the Premier workers are considerably higher. The average per capita annual earnings of employees in manufacturing industries are given below along with those of Premier workers:

Average per capita annual earnings of employees in manufacturing in 1962	
All states . . .	Rs. 1,599.63
State of Maharashtra . . .	Rs. 1,866,61
Premier sample (1965) . . .	Rs. 2,808.00

Aside from other considerations, the high wages make Premier one of the high prestige factories to work in. But, it should be remembered that automobile workers constitute only about one percent of the total factory employment in India.

The median age of the Premier worker is 31 years. No worker in our sample is below the age of 21 and only a small number are fifty years of age or older. Four-fifths of the workers are married and they have, on the average, 2.2 children per family.

To sum up the above, workers in Premier differ substantially from the surrounding population. They seem to have been selectively drawn from the larger society in terms of educational and occupational background. The industry appears to prefer the educated workers over the non-educated, urban-born over the rural-born, and those with experience in industrial-manufacturing occupations over

the ones with background in agriculture or business and services occupations. It is a combination of these factors, among others, that gives the work force of this industry a rather unique character.[10]

Interrelationships of Background and Other Demographic Characteristics

In the following portion of this chapter we propose to examine the interrelationships of some of the major variables that have been described above individually. Table 1 shows their interrelationships in a summary form. In preparing this table, we cross-tabulated each of the twelve variables against all others and, thus, the data presented in the table are based on 66 bivariate contingency tables. For obvious reasons, it would perhaps hinder rather than help understanding the interrelationships if we had included all the tables here. On the other hand, presentation of the data in the present form (which is perhaps overly simplified) can be misleading. Thus, for example, the responses like "high" or "married" or "urban" as indicated in the table should be read in terms of more or less and not in an absolute sense. Unless otherwise indicated by "n.s." (not significant), all relationships presented in the table are statistically significant. And the level of significance in all but three cases (1x9, 1x10, 2x10) is 5% ($P < .05$) or better. In the three cases, which have been underlined in the table, the relationships are significant at 10% level ($P < .10$). Each of the twelve variables included in the table will be described next in relation to all others, thereby presenting a series of "profiles"

10. For further sample data, please refer to Appendix B.

Table 1. Interrelationships among independent variables (Read across, left to right)

		Rural-urban background 1	Religion 2	Caste status 3	Education 4	Occupational background 5	Seniority 6	Wages 7	Occupational status (functions) 8	Occupational status (department) 9	Age 10	Marital status 11	Number of children 12
Urban born	1	-	Non Hindu	n.s.	n.s.	Indus. -Mfg.	High	High	High	High	Old	n.s.	n.s.
Hindu	2	Rural	-	-	High	n.s.	Low	n.s.	n.s.	High	Young	Single	Fewer
Upper caste	3	n.s.	-	-	High	Indus. -Mfg.	Low	Low	n.s.	n.s.	Young	Single	Fewer
High Education	4	n.s.	Hindu	Upper	-	Indus. -Mfg.	Low	Low	High	High	Young	Single	Fewer
Industrial Background	5	Urban	n.s.	Upper	High	-	n.s.	High	High	High	n.s.	n.s.	n.s.
High Seniority	6	Urban	Non Hindu	Lower	Low	n.s.	-	High	High	Low	Old	Married	Many
High wages	7	Urban	n.s.	Lower	Low	Indus. -Mfg.	High	-	High	High	Old	Married	Many
High occupational status (F)	8	Urban	n.s.	n.s.	High	Indus. -Mfg.	High	High	-	High	Young	n.s.	n.s.
High occupational status (D)	9	Urban	Hindu	n.s.	High	Indus. -Mfg.	Low	High	High	-	Young	n.s.	Fewer
Old	10	Urban	Non Hindu	Lower	Low	n.s.	High	High	Low	Low	-	Married	Many
Married	11	n.s.	Non Hindu	Lower	Low	n.s.	High	High	n.s.	n.s.	Old	-	Many
3 or more children	12	n.s.	Non Hindu	Lower	Low	n.s.	High	High	n.s.	Low	Old	Married	-

of the Premier worker. For this purpose we have grouped the twelve variables into three broad groups: (1) background factors, (2) occupational variables, and (3) demographic characteristics.

1. Background Factors (Rural-Urban Background, Religion, Caste Education)

Compared with the other two groups, the background factors are relatively less critical in the work lives of Premier workers. And yet, some of these factors, particularly education, provide a key to our understanding several of the other aspects of the work force.

RURAL-URBAN BACKGROUND: The urban-born workers (compared to the rural born), typically, are non-Hindus, are slightly older and have past experience in industrial-manufacturing occupations. Such workers have been with the firm for a longer period of time and, therefore, earn higher wages than the more recently hired, rural-born workers. Primarily because of their length of employment in Premier, and the occupational experience gained therein, these older, urban-born workers are found mostly in high status jobs and departments of the factory. Caste status, level of education, marital status, and number of children show no differences for place of birth, whether rural or urban.

RELIGION: The Hindu workers, compared to the non-Hindus, generally come from rural places, and seem to have a higher level of education. The Hindus, typically, joined Premier more recently and, thus, have lower seniority as compared to the non-Hindu workers. Finally, the Hindu workers are younger in age, are increasingly unmarried, and have fewer children if married. Although a greater proportion of Hindus work in the high status departments of the factory e.g.,

repair, design, and manufacturing departments, they do not necessarily hold high status jobs there. Also, there is no relationship between religion, on the one hand, and such factors as occupational background, wages, and occupational status, on the other.

CASTE: Among the Hindu workers, caste is related to several characteristics. The higher caste Hindus (in contrast to the lower caste Hindus) have more education and have had experience in the industrial-manufacturing sector. But these higher caste, Hindu workers are relatively young, have lower seniority in Premier and, therefore, earn lower wages. Being younger, these workers are, typically, unmarried and have fewer children if married. The higher caste workers, however, do not differ from their lower caste counterparts in such matters as occupational status within the factory or place of birth (rural-urban).

EDUCATION: Workers with higher education are generally Hindus and members of upper castes, if Hindus. Such workers usually come from industrial-manufacturing background and work in the high status jobs and departments of the factory. This is so in spite of the fact that most of these highly educated workers are relatively young, have lower seniority in Premier, and earn lower wages. The inverse relationship between education and age is reflected in the fact that the workers with higher education, typically are unmarried and have fewer children if married. Surprisingly enough, there are no significant differences between the rural-born and the urban-born workers in terms of level of education. It appears that only those of the rural-born are selected for employment in the factory who have some education. The notion of the illiterate rural migrants

taking up jobs in city factories is not supported by the data from this study.

2. Occupational Variables (Occupational Background, Seniority, Wages, Occupational Status)

With only one exception, each of the four occupational variables is significantly related to all others. Also, this group of variables shows high association with demographic characteristics like age, marital status, and number of children. By and large, the occupational variables are only weakly related to background factors.

OCCUPATIONAL BACKGROUND: Workers with past experience in industrial-manufacturing occupations (in contrast to those with background in agriculture or business and service occupations) are more likely to be urban-born and, if Hindus, members of the upper castes. Such workers usually have more education, earn higher wages, and work in high status jobs and departments of the factory. There is no significant relationship between occupational background, on the one hand, and religion, length of service in Premier, age, marital status and number of children, on the other.

SENIORITY: Length of service in Premier is related to both background variables as well as several demographic characteristics. Thus, workers with longer seniority (in contrast to those who joined more recently) are usually urban-born, non-Hindus, and, if Hindus, members of the lower castes. Such workers have a lower level of education, are older, married, and have more children if married. Mainly, due to their longer seniority in the plant, these workers are holding high status jobs and earn higher wages, although most of them

usually work in low status departments of the plant. There is no significant relationship between seniority in Premier and occupational background before entering this plant.

WAGES: The wage policy in Premier is such that it rewards age and seniority more than, for example, level of education. Thus, the workers earning higher wages are mostly older, have more seniority in Premier, are married, and have more children if married. Such workers, compared to the lower paid ones, are usually urban-born, have less education, and belong to lower castes if Hindus. The highly paid workers have had previous experience in industrial-manufacturing occupations. Most of these workers are found in high status jobs and departments of the factory. There are no differences in wages between the Hindu and non-Hindu workers.

OCCUPATIONAL STATUS (FUNCTIONS):[11] The high status jobs in Premier are generally held by workers who come from urban background and who have had past experience in industrial-manufacturing occupations. The holders of high status jobs have higher education, more seniority, and earn higher wages. Such workers tend to be relatively younger than those in low status jobs. There is no significant relationship between occupational status, on the one hand, and such factors as religion, caste, marital status, and number of children. Thus, none of these background factors either encourage or discourage the movement of a worker in the occupational hierarchy of the plant.

OCCUPATIONAL STATUS (DEPARTMENT): The departmental hierarchy generally corresponds to the "functional" ranking discussed above.

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11. In view of the importance of this major independent variable, more detailed data concerning association between this and other independent variables have been included in Appendix C.

This is so because most of the high status jobs (e.g., craftsmen, mechanics, etc.) are usually found in the high status departments, just as the routine manual workers, typically, work in low status departments of the factory. The distinction between the two ranking devices is made only for analytical purposes. The workers in the high status departments (especially the more recently added manufacturing departments) are relatively younger, have low seniority, and, if married, have fewer children. But these workers have more education, have had experience in industrial-manufacturing occupations, and earn higher wages. Finally, such workers (in the high status departments, that is) are urban-born and a higher proportion of them are Hindus. There is no relationship between occupational status (department) and caste status or marital status.

3. Demographic Characteristics (Age, Marital Status, Number of Children)

These three demographic characteristics are related to many others. Thus, the older workers have more seniority because of which they occupy high status jobs and earn higher wages. Of course, a greater proportion of the older workers are married and have more children if married. It is strongly felt that the age of workers influences many of the relationships that are being discussed here. It is, therefore, proposed to pay particular attention to this demographic characteristic in our subsequent analyses in the following chapters.

AGE: Most of the older workers in Premier are urban-born, non-Hindus, and members of the lower castes if Hindus. The older workers have less education and work in the low status jobs and departments

of the plant. But mainly because of their longer service in Premier these workers earn higher wages. Finally, age is of course positively related to marital status as well as number of children. There are no significant differences between younger and older workers in terms of occupational background prior to entering Premier.

MARITAL STATUS: A higher proportion of the married workers are non-Hindus or, if Hindus, members of the lower castes. The married workers (in contrast to the unmarried) have less education. They are older, have more seniority, and earn higher wages. There is no relationship between marital status and such factors as rural-urban background, occupational background, and occupational status in the factory.

NUMBER OF CHILDREN: The workers with more children are of course older, have more seniority, and earn higher wages. These workers are, typically, non-Hindus and, if Hindus, members of the lower castes. They have relatively less education and work in the low status departments of the plant. There is no significant relationship between number of children a worker has and such factors as rural-urban background, occupational background, and occupational status.

Conclusion

The foregoing discussion may appear to be overly repetitious, but a closer examination of the material shows that each of the twelve profiles is just a little bit different from all others. Thus, while age and marital status are very closely related to each other, they still are different and their differences become clear when we discuss the relationship of each with all other variables.

The several "profiles" of the Premier worker presented above describe the various characteristics of the work force only in gross terms. Yet, hopefully the reader will get an idea of the interrelationships of many dimensions in what is considered to be the least complicated manner. Here we attempt to draw an even more general picture by summarizing the foregoing presentation.

The Hindu workers constitute about two-thirds of the total sample. This proportion roughly corresponds to the total factory work force as well as to the population of Greater Bombay. But the distribution of Hindu workers in various jobs and departments of the factory does not appear to be random. Compared to the non-Hindus, the Hindu workers are younger and possess lesser seniority in Premier, but they have relatively higher education. It appears from this that when the factory began its expansion program in the fifties, and began adding the "manufacturing" departments, a higher proportion of Hindus than non-Hindus were recruited at that time. Since the manufacturing and maintenance operations required both experience in technological work and certain amount of education, the new recruitees were usually younger persons. Now, although technological background is randomly distributed among Hindu and non-Hindu workers, such is not the case with education, which is higher among the Hindus, at least, among the Premier workers we studied.

Thus, the relatively younger workers who were hired in the fifties and thereafter have more education. They are, typically, unmarried and have fewer children if married. Most of the upper caste Hindus happen to be in this category. Such workers usually work in the middle status, manufacturing departments and the high status

departments like tool room, assembly repairs, etc., but rarely on the final assembly line or low status departments like it. In spite of their higher level of education, and upper caste affiliation, however, these more recently recruited young Hindu workers have not necessarily had previous experience in industrial-manufacturing occupations, nor do they come from urban background. Such workers are, typically, rural born and they receive on-the-job training in Premier.

Since wages are a function of length of service in Premier, the Hindu workers having relatively less seniority are earning lower wages, compared to the non-Hindus. There seems to be another reason for their earning lower wages. Even though the Hindus, typically, work in high status departments of the factory, they are not necessarily working in high status jobs. In fact, there is no significant relationship between occupational status and religion or between occupational status and caste status.

The predominantly unskilled workers initially recruited in Premier were by and large urban-born, non-Hindus or members of lower castes if Hindus. These workers had relatively lower education. Today, those of the initially recruited workers who are still in Premier are, naturally, older, have more seniority, are married, and have more children if married. Although these older, urban-born workers did not necessarily have previous experience in industrial-manufacturing occupations, they have gained prolonged on-the-job training and experience and, therefore, many of them have moved up the occupational status ladder in the factory. Most of these workers are still in the low status departments, but are working in high

status jobs. The high status departments are, typically, manned by the young, new recruitees. Having been with Premier for some ten years or longer, these older workers earn higher wages, compared to the young, new recruitees.

Regardless of differences in age and length of service in Premier, such factors as level of education and background in industrial-manufacturing occupations are positively related both to each other and also to occupational status in the factory. Most of the workers who have this kind of background happen to be Hindus. Thus, whereas not all high-caste Hindus hold high status jobs in Premier, those among them who are urban-born and who have previous experience in industrial-manufacturing occupations are usually in high status jobs, irrespective of age. Similarly, occupational background being randomly distributed among Hindus and non-Hindus, those among the non-Hindus who have more education and previous experience in industrial-manufacturing occupations occupy high status jobs, regardless of their age.

In the following two chapters we will present analysis of the data. While the major independent variable is occupational status, we intend to examine the role of occupational status in shaping the work experience of workers <u>in relation to</u> the many variables discussed in the present chapter.

CHAPTER IV

OCCUPATIONAL STATUS AND WORKER SATISFACTION

This chapter will present data to test the hypotheses already proposed regarding occupational status and its impact on worker satisfaction. There are five inter-related "areas" of work experience that shall be examined here. The chapter has been organized around discussion of each of these five dimensions:

1. Situs Satisfaction
2. Satisfaction with the Company
3. Satisfaction with the Occupation
4. Occupational Aspirations
5. Job Satisfaction

Our analysis will begin with an examination of the relationship between occupational status and satisfaction with each of the five "areas" of work experience mentioned above. Next, we propose to investigate if worker satisfaction is also related to some of the background and demographic variables discussed in the previous chapter. It has already been shown that occupational status is definitely related to several other variables and, therefore, our final task will be to "control" for those of the independent variables which, like occupational status, are associated with worker satisfaction. The end result of this analysis, hopefully, will be to determine the relative importance of occupational status vis-a-vis other factors in contributing to worker satisfaction.

Worker satisfaction has been measured through a series of questions, both direct and indirect as well as structured and open-ended, which were later combined, wherever possible, to form indexes

of satisfaction with each of the five "areas" of work experience mentioned above. We made the following assumptions in index constructions: (1) Several questions designed to measure work satisfaction are better for the purpose than a single question; (2) The degree to which these questions correlate with one another provides some tentative evidence that there may be such a variable as "work satisfaction" at work in the social world; (3) The summed values of these inter-related items can function as the measurement of that variable; and (4) The degree to which these measurements relate to other measurements - beyond the reasonable limits of chance - provides further basis for confidence that a variable (e.g., "work satisfaction") has been identified and that it has some interpretative value.[1]

1. Situs Satisfaction

The economic system is usually divided by social scientists into three main sectors: the primary sector (or, agriculture), the secondary sector (or, industry), and the tertiary sector (or, commerce and services). During the recent years, many writers have examined the role of "labor force commitment" in economic development of a society. It is argued by some of these writers that the industrial "way of life" is characterized by a complex of attitudes and behaviors and that to the extent that a society's labor force lacks those attitudes and behaviors we can account for its lack of economic development. Much of the literature on

1. F. B. Waisanen and Jerome T. Durlak, A Survey of Attitudes Related to Costa Rican Population Dynamics, San Jose, Costa Rica: American International Association for Economic and Social Development, 1966.

this subject is, however, speculative and what little empirical evidence there is comes primarily from anthropological field studies, which are usually studies of small rural or mining communities. Thus, there is no systematic attempt at cross-national comparisons to show in what ways, and to what extent, the attitudes and behavior patterns of labor force differ from one society to another, at different levels of development.

While this study is not an investigation of labor force commitment per se, it is maintained that study of "situs satisfaction" is directly relevant to the general theme of "commitment," at least in so far as the workers' attitudes concerning modern factory work are concerned. We propose to test the hypothesis that occupational status is positively related to situs satisfaction.

An index of situs satisfaction was constructed by combining seven items which were found to possess sufficient internal consistency. These seven items are listed below:

	Situs Satisfaction Low	Situs Satisfaction High
1. If you could go back to the age of 15 and start life over again, would you choose an occupation other than factory work?	Yes	No
2. With the same net income, which of the following types of work would you prefer?	Office Work	Factory Work
3. Suppose that the following three were jobs with the same annual income: an office worker, a skilled factory worker, and a small independent farmer ... which of these three do you believe is the occupation that gives most satisfaction?	Other	Factory Worker
4. ... Which of these three do you believe is the occupation most desirable?	Other	Factory Worker

	Situs Satisfaction	
	Low	High
5. ... Which of these three do you believe is the occupation most respected?	Other	Factory Worker
6. Compared with other types of work, how do you rate your occupation?	Fair/ Poor	Good
7. Of these occupations (including present job) which one did you like most?	Other	Industrial-manufacturing

The inter-item associations for the seven items listed above are given in Table 2. The statistic used in this table is Contingency Coefficient ($\bar{C}$), after correction. Except in one case (that is, the association between items 2 and 6) all other associations are significant at .05 level or better.

The seven-item index of situs satisfaction yielded eight score types, 0 through 7, which were then grouped into three categories as follows:

Index of Situs Satisfaction	Number of Cases
Low (scores 0, 1, 2)	80
Medium (scores 3, 4)	86
High (scores 5, 6, 7)	62
Total	228

Thirty-four workers in the sample failed to respond to all seven items under discussion. Hence, our measurement of situs satisfaction is based only on 228 cases for which responses to all seven items are available.

The association between occupational status, our major independent variable, and situs satisfaction is shown in Table 3. Clearly, these two variables are related to each other. Whereas almost three-fifths of the "low" status workers show a low level

of situs satisfaction, the corresponding proportion for the "high" status workers is less than one-fourth. Conversely, a little over one-third of the "high" status workers, compared to a little over one-tenth of the "low" status workers, are highly satisfied with their present (industrial) sector of employment.

Table 2. Inter-item associations for index of situs satisfaction*

	1	2	3	4	5	6	7
1	-	.415	.394	.276	.204	.444	.264
2		-	.335	.351	.224	.156**	.299
3			-	.680	.394	.205	.225
4				-	.541	.324	.306
5					-	.322	.334
6						-	.267
7							-

*The items 1 through 7 as listed in this table are in the same order as they appear on the preceding page. The statistic used in this table in Contingency Coefficient, C, after correction.

**The association in this case (between items 2 and 6) is significant at .20 level. However, except for this one case, all other relationships as depicted in this table are significant, at least at .05 level.

Table 3. Occupational status and situs satisfaction*

Index of Situs Satisfaction	Occupational Status			
	Low	Medium	High	Total
Low	57%	28%	23%	36%
Medium	31	43	43	39
High	12	29	34	25
Total	100	100	100	100
Number of Cases	(74)	(75)	(79)	(228)

$X^2 = 23.918$ d.f. = 4 $P < .001$ $\bar{C} = .418$**

*In this, and in subsequent tables, data are presented as rounded percentages, which add up to 100 when added down for each column.

**In addition to Chi-square, we will use Contingency Coefficient, $\bar{C}$, after correction, as a measure of the extent of association between two sets of attributes. The use of the second statistic, $\bar{C}$, will be limited to only those tables where the relationship between two variables is significant at 10% ($P < .10$) or better. Despite its many limitations, Contingency Coefficient is particularly appropriate for the kind of data we have, which are often only categorical (nominal scale). The function of "correction" in this case is to standardize $\bar{C}$ for tables of different sizes, that is, with different columns and/or rows.

In the present case, therefore, the hypothesis that occupational status is positively related to situs satisfaction finds overwhelming support from the data. As the industrial worker moves up in the occupational hierarchy, his satisfaction with and commitment to the industrial sector of employment increases. It is the routine manual worker, and to a lesser extent the machine operator, who prefers non-factory work over factory employment.

While it is true that a knowledge of the occupational status of a worker enables us to predict, with reasonable accuracy, whether

or not he is satisfied with his present sector of employment, we cannot be sure merely on the basis of this evidence that occupational status "determines" situs satisfaction or dissatisfaction. It was found, for example, that situs satisfaction could also be predicted, with similar accuracy, from a knowledge of the worker's (1) wages, (2) occupational background, (3) level of education, or (4) rural-urban background. The relationships between situs satisfaction and each of the four factors listed above are presented in Table 4 below.

Table 4. Association between situs satisfaction and some of the independent variables

Relationship between situs satisfaction and . . .	X^2	d.f.	P	$\bar{C}$
1. Wages (positive)	6.722	2	$<.05$	.247
2. Occupational background (positive)	12.711	2	$<.01$	.346
3. Education (positive)	7.375	2	$<.05$	.258
4. Rural-urban background (positive)	8.569	2	$<.02$	.319

Here, then, we have a situation in which situs satisfaction is related positively to two occupational variables (occupational status and wages) and to three background factors (occupational background, level of education, and rural-urban background). As was mentioned in the previous chapter, most of these five variables are related to each other. The problem, therefore, becomes one of establishing the relative importance of each of these five factors in influencing situs satisfaction. It must be noted here that

our main concern in this study is not to present a thorough analysis of worker satisfaction per se, but to examine the role of occupational status in affecting worker satisfaction. Partly due to this reason and also because our dependent variables are quite a few, the analysis will, of necessity, be somewhat limited in scope.

The interrelationships among the six variables under discussion are presented in Table 5 below.

Table 5. Interrelationships among situs satisfaction and other variables*

		Occ. Status 1	Wages 2	Occ. Bgd. 3	Educ. 4	Rur-Urb. 5	Sit.-Sat. 6
Occupational Status (functions)	1	-	.360	.382	.330	.352	.418
Wages	2		-	.284(-)	.368	.356	.247
Occupational Background	3			-	.246	.259	.346
Education	4				-	n.s.	.258
Rural-Urban Background	5					-	.319
Situs Satisfaction	6						-

*The statistic used in this table is Contingency Coefficient, $\bar{C}$, after correction. Except where otherwise indicated by "n.s." (not significant), the values for $\bar{C}$ as indicated above are statistically significant at .05 level or better. The sign (-) means that the relationship in question is inverse.

Since the six variables mentioned above are inter-related with one another our next task is to investigate whether or not the original relationship between occupational status and situs

satisfaction is "independent" of the influence of the other four variables. This was done by introducing each of the four variables as the "test" factor, or the "control" variable. Due to the limitations of small sample size, each of the control variables was dichotomized. The new relationships between the independent variable (occupational status) and the dependent variable (situs satisfaction) produced as a result of controlling for third variable are presented in Table 6 through 9.

As will be noticed in these tables, it is only among the low-paid workers, the less educated, those without previous experience in industrial-manufacturing occupations, or the rural born that the original relationship between occupational status and situs satisfaction holds. In other words, there is no relationship between our independent and dependent variables among the workers earning higher wages, the more educated, those with experience in industrial-manufacturing occupations, or the urban born. We consider this a significant finding in that we have "specified" the conditions under which the relationship between occupational status and situs satisfaction holds.

The above findings (though helpful in specifying the original relationship) nevertheless come as a surprise. In line with our theoretical posture maintained here, we would expect that the Industrial Man is the worker who had more education, earns higher wages, has prior exposure to the industrial-manufacturing sector of employment, and is urban born. Such a worker, we would further suggest, is more committed to the factory employment because of his longer period of socialization and greater rewards.

Table 6. Association between occupational status and situs satisfaction with wages held constant

Index of Situs Satisfaction	LOW WAGES				HIGH WAGES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	64%	30%	28%	42%	42%	24%	20%	26%
Medium	30	40	38	36	33	48	46	44
High	6	30	34	22	25	28	34	30
Total	100	100	100	100	100	100	100	100
Number of Cases	(50)	(50)	(29)	(129)	(24)	(25)	(50)	(99)
	$\underline{X}^2 = 18.969$ P <.001 d.f. = 4 $\underline{C} = .485$				$X^2 = 4.215$ P <.50 d.f. = 4			

Relationship between:	1) Occupational Status and Situs Satisfaction	$X^2 = 23.918$	P <.001 d.f. = 4 $\bar{C} = .418$
	2) Occupational Status and Wages	$X^2 = 17.011$	P <.001 d.f. = 2 $\bar{C} = .360$
	3) Wages and Situs Satisfaction	$X^2 = 6.722$	P <.05 d.f. = 2 $\bar{C} = .247$

Table 7. Occupational status and situs satisfaction, controlled for occupational background

Index of Situs Satisfaction	NON-INDUSTRIAL BACKGROUND				INDUSTRIAL BACKGROUND			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	60%	41%	25%	45%	46%	16%	18%	21%
Medium	30	39	40	35	27	42	49	43
High	10	20	35	20	27	42	33	36
Total	100	100	100	100	100	100	100	100
Number of Cases	(60)	(39)	(40)	(139)	(11)	(31)	(33)	(75)
	$X^2 = 15.036$ $P < .01$ d.f. = 4 $\bar{C} = .423$				$X^2 = 5.025$ $P < .30$ d.f. = 4			

Relationship between:

1) Occupational Status and Situs Satisfaction — $X^2 = 23.918$ $P < .001$ d.f. = 4 $\bar{C} = .418$

2) Occupational Status and Occupational Background — $X^2 = 17.071$ $P < .001$ d.f. = 2 $\bar{C} = .382$

3) Occupational Background and Situs Satisfaction — $X^2 = 12.711$ $P < .01$ d.f. = 2 $\bar{C} = .346$

Table 8. Occupational status and situs satisfaction by educational level

Index of Situs Satisfaction	LOW EDUCATION				HIGH EDUCATION			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	59%	26%	27%	40%	50%	30%	18%	29%
Medium	32	45	49	41	28	41	35	37
High	9	29	24	19	22	29	47	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(56)	(31)	(45)	(132)	(18)	(44)	(34)	(96)
	$\chi^2 = 15.784$ $P < .01$ d.f. = 4 $\bar{C} = .443$				$\chi^2 = 7.515$ $p < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Situs Satisfaction — $\chi^2 = 23.918$ $P < .001$ d.f. = 4 $\bar{C} = .418$

2) Occupational Status and Education — $\chi^2 = 14.124$ $P < .001$ d.f. = 2 $\bar{C} = .330$

3) Education and Situs Satisfaction — $\chi^2 = 7.375$ $P < .05$ d.f. = 2 $\bar{C} = .258$

Table 9. Occupational status and situs satisfaction, according to rural-urban background of worker

Index of Situs Satisfaction	RURAL BORN				URBAN BORN			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	60%	30%	25%	40%	44%	26%	19%	27%
Medium	28	45	47	39	44	39	37	39
High	12	25	28	21	12	35	44	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(58)	(44)	(47)	(149)	(16)	(31)	(32)	(79)
	$X^2 = 16.305$ $P < .01$ d.f. = 4 $\bar{C} = .425$				$X^2 = 5.703$ $P < .30$ d.f. = 4			

Relationship between:

1) Occupational Status and Situs Satisfaction — $X^2 = 23.918$ $P < .001$ d.f. = 4 $\bar{C} = .418$

2) Occupational Status and Rural-Urban Background — $X^2 = 12.185$ $P < .01$ d.f. = 2 $\bar{C} = .352$

3) Rural-Urban Background and Situs Satisfaction — $X^2 = 8.569$ $P < .02$ d.f. = 2 $\bar{C} = .319$

But the findings of this study are quite the opposite. The workers among whom technological work environment (as manifested in the occupational status of each worker) is most relevant in affecting worker satisfaction or dissatisfaction with the industrial sector are far from resembling the Industrial Man as assumed. These workers are, on the other hand, the less paid, the less educated, those without prior experience in the industrial sector, or the rural born. It appears that, in contrast to their opposites, the workers under discussion here are probably more concerned with the question of job security. For most of them the present employment represents the high point of their occupational achievement. Compared to this group, the urban born, the more educated, those with previous exposure to the industrial sector, or the workers earning higher wages represent the upper stratum in terms of socio-economic status, and they still aspire for further upward mobility.

Such factors as age, religion, caste status, and life orientation (non career-oriented vs. career-oriented) are not related to situs satisfaction. And, what is even more important, when we controlled for each of these variables, the original relationship between occupational status and situs satisfaction persisted. It appears from this that the original relationship is "independent" of age, religion, caste, or life orientation.

We extended the scope of our analysis another step further. Starting with a dozen or so of independent variables we have gradually eliminated those which do not appear to have an impact on situs satisfaction. But we still have, in addition to occupational status, some four independent variables that seem to "condition"

the relationship between occupational status and situs satisfaction. They are: wages, occupational background, education, and rural-urban background. While it has already been shown that a worker's occupational status has a decisive effect upon his satisfaction with the industrial sector of employment, the relative importance of the other four variables in affecting situs satisfaction still remains to be shown.

With the above objective in mind, we examined the relationship between each of the four variables - wages, occupational background, education, and rural-urban background - and situs satisfaction <u>when occupational status is held constant</u>. As a result of this analysis, we discovered that when controlled for occupational status the relationship between situs satisfaction on the one hand and either education or rural-urban background on the other disappeared completely. We may conclude from this that level of education or rural-urban birthplace does not directly affect situs satisfaction among the workers studied. Any relationship that was observed to exist between these variables in the early stages of our analysis was, therefore, spurious.

We are now left with two variables (besides occupational status) that are related to situs satisfaction. These are wages and occupational background. When controlled for occupational status, the relationship between each of these two variables and situs satisfaction did not disappear altogether. At the same time, however, we noticed that neither wages nor occupational background has a uniform impact on workers at different status levels in so far as situs satisfaction is concerned. Wages are related to situs

satisfaction, for example, only among the "low" status workers, e.g., assemblers and other routine manual workers. And it is only among the middle status workers (machine operators, etc.) that situs satisfaction is related to occupational background of a worker.

We may conclude this section by suggesting that the Indian automobile worker's commitment to the industrial sector of employment is primarily shaped by his position in the occupational status ladder in the factory. Those workers who are more positively oriented toward the industrial-manufacturing sector of employment are, typically, the craftsmen who have greater control in carrying out their occupational activities. Conversely, the lower the occupational status, the lower is the satisfaction of a worker with the situs. This relationship between occupational status and situs satisfaction was found to be "independent" of a number of factors like, for example, religion, caste, marital status, number of children, and age. Some other factors, such as seniority, occupational mobility, education, rural-urban background, wages, and occupational background, were found to have an indirect effect on the relationship between occupational status and situs satisfaction, but further analysis revealed that among them only two (wages and occupational background) were really important while the others were simply functions of either these two variables or of some others.

Finally, let us examine the reasons for situs satisfaction being related to both wages and occupational background among certain categories of workers. As already noted, wages are related to situs satisfaction only among the assemblers and other

lower status manual workers. Most of such workers (in contrast to the middle and top status groups) are drawn from rural rather than urban places; they have relatively less education; they have had no previous experience in industrial-manufacturing occupations; and their occupational history shows that they are either downwardly mobile or at about the same level of occupational status at which they started their occupational career. For this group of workers, then, situs satisfaction is a function of wages, rather than that of such factors as work environment which is found to be the most common determinant of situs satisfaction among the remaining workers in our sample.

The other of the two variables, occupational background, is related to situs satisfaction among only the middle-status workers (machine operators, etc.). A comparison of these workers with both the assemblers as well as the craftsmen revealed that the workers in the "middle" are, typically, younger, have less seniority in Premier, fewer of them are married, and have fewer children if married. But these middle-status workers have more education than either of the other two groups. Although such workers are younger and relatively recent entrants to the factory, they share at least one characteristic with the high-status craftsmen (who are older and have more seniority) and that is "occupational background." Both machine operators and craftsmen have about one-half of their numbers drawn from the industrial-manufacturing background. But, in spite of this similarity in occupational background between the top two groups, the wages earned by the middle group equal those of the low-status assemblers and other routine manual workers.

This is so because wages are directly related to length of employment in Premier. It appears that past experience in industrial-manufacturing background is of much significance to the middle-status machine operators in that it brings them closer to the upper bracket of factory workers despite young age and low seniority, etc. Hence, the relationship between occupational background and situs satisfaction among these workers.

The foregoing section suggests that each of the three variables - occupational status, wages, and occupational background - is not only related to the other two but also to worker's satisfaction with his present sector of employment. It was also observed that although the three factors are interrelated, each affects situs satisfaction to some extent independently of the other two. Thus, for instance, occupational status is related to situs satisfaction, but only among the less-paid workers or those with occupational background in non-industrial/manufacturing occupations. On the other hand, wages are related to situs satisfaction only among the assemblers, while occupational background affects situs satisfaction among the machine operators only. The relative importance of wages vis-a-vis occupational background will be examined next.

When controlled for occupational background, the relationship between wages and situs satisfaction disappears completely. But, when wages are held constant, the relationship between occupational background and situs satisfaction still holds for the "low" wage group. Between wages and occupational background, then, the latter appears to be more important in influencing situs satisfaction. Occupational status and occupational background, therefore, are

perhaps the significant variables that shape a worker's commitment to the industrial sector of employment. Some of the other factors (e.g., wages, education, rural-urban background) also affect situs satisfaction, but this is caused more by the peculiar circumstances surrounding the growth of the factory than any direct connection between situs satisfaction and any of those other variables. Socio-cultural background factors or demographic characteristics of the workers we studied seem to have no impact on their commitment to the industrial sector of employment.

2. Satisfaction with the Company

Being one of the highly-paid industries, an automobile plant should have no serious problem in hiring and then keeping a work force that is relatively satisfied with its management and policies. However, as Goldthorpe notes, the car industry in both Great Britain and the United States is among the most strike-prone of all and suffers in particular from a high rate of unofficial disputes.[2] In their analysis of this situation both Blauner and Sayles argue that dissatisfaction with the routine and repetitive work (e.g., on the final assembly line) is projected in the automobile worker's hostility toward his firm.[3] Walker and Guest, likewise, suggest that an automobile assembler's frustration and resentment engendered by his work

2. John H. Goldthorpe, "Attitudes and Behavior of Car Assembly Workers: A Deviant Case and a Theoretical Critique," The British Journal of Sociology, 17 (September 1966), pp. 227-244.

3. Robert Blauner, Alienation and Freedom: The Factory Worker and His Industry, Chicago: The University of Chicago Press, 1964, pp. 121-123; Leonard R. Syales, Behavior of Industrial Work Groups: Prediction and Control, New York: John Wiley and Sons, 1958, pp. 27-32.

experience is expressed in incessant "griping" or in bursts of open defiance of management.[4]

Our measurement of workers' satisfaction with their company is based on their responses to a single, direct question:

> "For a person in your trade or occupation, how do you think your company compares with other places in the Bombay area?"

The responses to the above question included: (1) other places are better, (2) own company is as good as others, and (3) own company is better. Of the workers who gave a response to this question, over three-fifths said that their company was better than other places in the Bombay area. This rather high evaluation among the workers was quite noticeable to the writer during his personal observations over a period of eight months. The remaining two-fifths of the workers considered their company to be as good as others (one-tenth) or said that other places in the Bombay area were better (three-tenths).

Our interest here is to test the hypothesis that occupational status is positively related to satisfaction with the company. Table 10 provides data to show the relationship between these two variables.

There appears to be no relationship between occupational status of a worker and his evaluation of the company he works for. Thus, we should reject the hypothesis in this case. Our finding contradicts the prevailing notions about the relationship between type of work a person does and his attitude toward the employers. It seems to confirm, on the other hand, Goldthorpe's assertion that "dislike for unsatisfying work-tasks can co-exist with appreciation of a firm ... "[5]

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4. Charles R. Walker and Robert H. Guest, The Man on the Assembly Line, Cambridge, Mass.: Harvard University Press, 1952, pp. 135-140.

5. Goldthorpe, op. cit., p. 237.

Table 10. Occupational status according to degree of satisfaction with the company

Satisfaction with the Company	Occupational Status			
	Low	Medium	High	Total
Low (other places are better - own company is as good as others)	41%	45%	33%	39%
High (own company is better)	59	55	67	61
Total	100	100	100	100
Number of Cases	(76)	(76)	(80)	(232)

$X^2 = 2.564$ d.f. = 2 $P < .30$

Although satisfaction with the company is not directly related to occupational status, it is possible that under certain specific conditions the two variables are associated with each other. We strongly suspect this because satisfaction with the company has been found to be related to wages and certain demographic characteristics such as age, seniority, and number of children. Thus, the workers who are earning higher wages are older and have more seniority in Premier. Such workers are more likely to be satisfied with the firm compared to those who earn lower wages, are younger, and have less seniority. Table 11 shows the relationships between satisfaction with the company and some of the independent variables discussed in the preceding chapter.

We have already shown in Chapter III that wages in Premier are a function of length of employment there which, in turn, is positively related to age of the worker. And of course, number of children, too, is related to age. It was also observed in the previous

chapter that age and caste status are negatively related to each other because the high caste Hindus are relatively younger and they seem to have joined Premier more recently. It appears that all of these five variables are inter-related and that the age factor is common to all of them.

Table 11. Association between satisfaction with the company and some independent variable

Relationship Between Satisfaction with the Company and ...	X^2	d.f.	P	$\bar{C}$
1. Wages (positive) ...	13,386	1	$<.001$	.367
2. Age (positive) ...	10.676	1	$<.01$	.329
3. Seniority (positive) ...	14.974	1	$<.001$	.387
4. Number of Children (positive) ...	10.119	1	$<.01$	.321
5. Caste (negative) ...	6.052	1	$<.02$	.300

We may conclude from the evidence presented thus far that whether or not a worker is satisfied with the firm he works in is not affected by his occupational status or such factors as level of education, occupational background, rural-urban background, etc. It appears that the longer a worker stays with a firm, the more satisfied he is with it. Of course, the longer a person stays with a firm, the greater will be his investment in terms of experience, wages, and other benefits. And, therefore, his satisfaction with the firm reflects perhaps his emphasis on safeguarding that investment. It is due to these reasons, then, that it is the extent of exposure to the social system of the factory (rather than a particular status-role within that

system) that determines whether or not a person likes his firm. This may be seen in the fact that satisfaction with the company is consistently associated with age and some age-related variables, but seldom with occupational or background factors.

The above conclusion can be misleading. We are suggesting that satisfaction with one's firm increases with age and length of service in the firm. But our evidence is based only on the workers who are at present with the firm, and we have no information about the workers who have since left the firm because they were not satisfied with it. It is not unlikely that some of the workers who have since left the firm did so after several years' seniority. It will thus be more appropriate to qualify our conclusion by adding that it holds for the workers who are still working for the firm.

Although no relationship was found between occupational status and satisfaction with the company for the sample as a whole, we examined the said relationship after controlling for several other factors, one at a time. The objective of this subsequent analysis was to discover if the relationship between occupational status and satisfaction with the company would hold for a certain segment of the sample, that is, under certain conditions. The data obtained through this analysis are presented in Tables 12 through 16.

Once again we find that even after controlling for wages, age, caste, seniority, or number of children (each of which is related to satisfaction with the company), there is no relationship between occupational status and satisfaction with the company. We must, therefore, reject the hypothesis that favorableness to the firm is positively related to occupational status of the worker. At least

Table 12. Occupational status and satisfaction with the company with wages held constant

Satisfaction with the Company	LOW WAGES				HIGH WAGES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	43%	58%	45%	49%	36%	17%	24%	25%
High	57	42	55	51	64	83	76	75
Total	100	100	100	100	100	100	100	100
Number of Cases	(51)	(52)	(31)	(134)	(25)	(24)	(49)	(98)
	$X^2 = 2.453$ $P < .30$ d.f. = 2				$X^2 = 2.462$ $P < .30$ d.f. = 2			

Relationship between:

1) Occupational Status and Satisfaction with the Company — $X^2 = 2.564$ $P < .30$ d.f. = 2

2) Occupational Status and Wages — $X^2 = 17.011$ $P < .001$ d.f. = 2 $\bar{C} = .360$

3) Wages and Satisfaction with the Company — $X^2 = 13.386$ $P < .001$ d.f. = 1 $\bar{C} = .367$

Table 13. Occupational status and satisfaction with the company, controlled for age

Satisfaction with the Company	YOUNG				OLD			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	45%	52%	42%	46%	35%	22%	12%	24%
High	55	48	58	54	65	78	88	76
Total	100	100	100	100	100	100	100	100
Number of Cases	(47)	(58)	(55)	(160)	(29)	(18)	(25)	(72)
	$X^2 = 1.180$ $P < .90$ d.f. = 2				$X^2 = 3.788$ $p < .20$ d.f. = 2			

Relationship between:

1) Occupational Status and Satisfaction with the Company — $X^2 = 2.564$ $P < .30$ d.f. = 2

2) Occupational Status and Age — $X^2 = 11.779$ $P < .02$ d.f. = 4 $\bar{C} = .281$

3) Age and Satisfaction with the Company — $X^2 = 10.676$ $P < .01$ d.f. = 1 $\bar{C} = .329$

Table 14. Association between occupational status and satisfaction with the company with caste held constant

Satisfaction with the Company	LOWER CASTES				UPPER CASTES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	28%	25%	21%	25%	42%	59%	34%	45%
High	72	75	79	75	58	41	66	55
Total	100	100	100	100	100	100	100	100
Number of Cases	(18)	(12)	(19)	(49)	(31)	(39)	(41)	(111)
	$X^2 = 0.228$ P <.90 d.f. = 2				$\underline{X}^2 = 5.145$ P <.10 d.f. = 2 $\bar{C} = .306$			

Relationship between:

1) Occupational Status and Satisfaction with the Company — $X^2 = 2.564$ P <.30 d.f. = 2

2) Occupational Status and Caste — $X^2 = 1.053$ P <.90 d.f. = 2

3) Caste and Satisfaction with the Company — $X^2 = 6.052$ P <.02 d.f. = 1 $\bar{C} = .300$

Table 15. Occupational status and satisfaction with the company, according to seniority of worker

Satisfaction with the Company	LOW SENIORITY				HIGH SENIORITY			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	47%	53%	42%	48%	28%	17%	20%	22%
High	53	47	58	52	72	83	80	78
Total	100	100	100	100	100	100	100	100
Number of Cases	(51)	(58)	(45)	(154)	(25)	(18)	(35)	(78)
	$X^2 = 1.309$ $P < .90$ d.f. = 2				$X^2 = 0.909$ $P < .90$ d.f. = 2			

Relationship between:

1) Occupational Status and Satisfaction with the Company — $X^2 = 2.564$ $P < .30$ d.f. = 2

2) Occupational Status and Seniority — $X^2 = 9.679$ $P < .05$ d.f. = 4 $\bar{C} = .256$

3) Seniority and Satisfaction with the Company — $X^2 = 14.974$ $P < .001$ d.f. = 1 $\bar{C} = .387$

Table 16. Occupational status and satisfaction with the company with number of children held constant

Satisfaction with the Company	TWO OR FEWER CHILDREN				THREE OR MORE CHILDREN			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	49%	51%	39%	46%	29%	24%	19%	24%
High	51	49	61	54	71	76	81	76
Total	100	100	100	100	100	100	100	100
Number of Cases	(45)	(59)	(54)	(158)	(31)	(17)	(26)	(74)
	$X^2 = 1.805$ $P < .50$ d.f. = 2				$X^2 = 0.746$ $P < .90$ d.f. = 2			

Relationship between:

1) Occupational Status and Satisfaction with the Company — $X^2 = 2.564$ $P < .30$ d.f. = 2

2) Occupational Status and Number of Children — $X^2 = 3.927$ $P < .20$ d.f. = 2

3) Number of Children and Satisfaction with the Company — $X^2 = 10.119$ $P < .01$ d.f. = 1 $\bar{C} = .321$

in this case, our findings are in accord with those of Goldthorpe who maintains that satisfaction with the firm can co-exist with dissatisfaction with the work tasks.[6]

While it is true that as many as thirty percent of the workers studied considered "other places" in the Bombay area to be better than their own firm, their evaluation of the company (whether positive or negative) does not follow their position in the status hierarchy of the company. Lambert's study of Poona workers lends support to this finding. Lambert did not find any relationship between occupational rank (whether measured by current wages or occupational grade) and favorableness toward the factory and its management among workers below the level of supervisory and clerical workers.[7]

It appears that in this particular area of work experience the workers generally respond in terms of the rewards they obtain from the social system. And wages seem to be the single most important reward that influences worker satisfaction with his firm. Since wages in Premier are a function of length of service and of age, the latter two variables are also related to satisfaction with the company. We found no evidence to support the view that dissatisfaction with the work tasks will be reflected in terms of "generalized dissatisfaction" with the firm.

While the analysis thus far has been restricted to showing the impact, if any, of occupational status vis-a-vis other factors upon

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6. Goldthorpe, op. cit.

7. Richard D. Lambert, Workers, Factories, and Social Change in India, Princeton, New Jersey: Princeton University Press, 1963, Chapter V.

worker's favorableness towards his company, we would now like to subject each of the other correlates of satisfaction with the company to a closer examination. It has already been shown that among the workers studied, satisfaction with the company is positively related to each of the following factors: wages, age, seniority, children in the family. But the impact of these factors upon worker's response towards his company is not uniformly felt by all workers. When occupational status is held constant, we find that the above variables influence satisfaction with the firm only among the medium-status and high-status workers but not among the low-status workers. Among the latter workers, therefore, having higher wages, more seniority, or being old does not account for either greater or lower satisfaction with the firm.

Although the above findings are significant in that we have "specified" the conditions under which wages, age, seniority, and number of children affect satisfaction with the company, it still remains to be shown why the impact of these factors is not uniformly felt by the low-status workers. To do this we must recall the characteristics of the low-status workers under study. Typically, such workers are older than either the machine operators or the craftsmen and have, therefore, more seniority. Since seniority is one of the important factors in determining wages in Premier, the low-status workers (being older and having more seniority) earn wages, if not higher than those of the craftsmen, at least at par with the medium-status machine operators. It appears, therefore, that in spite of relatively higher wages, the low-status workers are not necessarily satisfied with the firm. Perhaps the routine and

repetitive tasks that these workers perform to some extent negates the impact of higher rewards in this case.

Following the procedure used thus far, we next examined the relative importance of each of the four correlates of satisfaction with the company - wages, age, seniority, and number of children. This was done by cross-tabulating every variable against the dependent variable, holding each of the other three variables constant. The purpose of this analysis was to determine which one or more of these four factors has a direct influence on the way a worker evaluates his company.

When either age or seniority is held constant, the relationship between number of children and satisfaction with the company disappears completely. When controlled for wages, however, the relationship disappears for the highly-paid workers, but holds for the low-paid workers. It is thus apparent that the number of children a worker has does not directly influence his satisfaction or dissatisfaction with the firm. Any relationship that we observed initially was spurious.

The relationship between age and satisfaction with the company, too, appeared to be a function of either wages or seniority, or both. When, for example, number of children is held constant, the relationship between age and satisfaction with the company disappears completely. Controlling for either wages or seniority we discovered that the relationship held only among the low paid or those with less seniority. Even in the latter case, however, we do not have high confidence in the existence of a relationship ($P < .10$).

Seniority appears to affect level of satisfaction with the firm,

although its impact is not uniformly felt by all workers. When controlled for number of children, the relationship between seniority and satisfaction with the firm holds for both "fewer children" and "many children" groups. Both wages and age seem to have a conditioning effect upon the relationship between seniority and satisfaction with the company in that the relationship holds only among the low paid or the younger workers, but not among the highly paid or older workers. Thus, although age does not affect satisfaction with the firm directly, it does seem to affect it through such factors as length of employment and wages.

Wages, like seniority, also have a direct impact on workers' evaluation of their company, although this impact is modified by the other three factors. The relationship between wages and satisfaction with the company holds only among the younger, the more recently recruited, or those with fewer children.

To sum up, wages, age, seniority and number of children are positively related to one another. Each of them is also related to satisfaction with the company. Occupational status was not found to be related to worker's evaluation of his company under any circumstances. However, the four correlates of satisfaction with the company do not have a uniform impact among all workers in so far as satisfaction with the company is concerned. For instance, none of them was found to be related to the dependent variable among the low status workers (e.g., assemblers and other routine manual workers). Similarly, the relationship between either wages or seniority (the two most important among the four variables) and satisfaction with the company holds only among the young workers who are, typically, working as machine operators or craftsmen in the factory.

3. Satisfaction with the Occupation

The hypothesis we want to test in this case is: occupational status is positively related to occupational satisfaction. Our measure of occupational satisfaction is based on the following two questions:

1. Is there anything that you do not like about your present occupation?

2. On the whole, how satisfied do you feel about being a factory worker?

These two items are similar not only in their manifest content, but were found to be related empirically too.[8] It was decided to combine the responses from the two items to form an index of occupational satisfaction. This index yielded three score types which are given below along with the number of cases for each type:

Index of Occupational Satisfaction	Number of Cases
Low (score of 0)	70
Medium (score of 1)	78
High (score of 2)	112
Total	260

Table 17 presents data showing the relationship between occupational status and occupational satisfaction. As will be seen

8. The relationship between the two items is: $X^2 = 43.505$; d.f. = 1 $P < .001$; $C = .594$. The second of the two questions, that is, "On the whole how satisfied do you feel about being a factory worker?" may appear to be similar to some of the questions included in the index of situs satisfaction already discussed. However, it may be pointed out that in the context in which this question was asked the worker was asked to think of his present occupation and, then, tell us how he felt about it. It is for this reason that the said question has been included in the index of occupational satisfaction rather than treating it as a situs question.

from this table, there is an inverse but low relationship between these two variables.

Table 17. Occupational status by satisfaction with the occupation

Index of Occupational Satisfaction	Occupational Status			
	Low	Medium	High	Total
Low	25%	32%	24%	27%
Medium	20	35	35	30
High	55	33	41	43
Total	100	100	100	100
Number of Cases	(87)	(85)	(88)	(260)

$X^2 = 10.977$ d.f. = 4 $P < .02$ $\bar{C} = .273$

The direction of the relationship between occupational status and occupational satisfaction will become perhaps a bit more obvious if we collapsed the "low" and "medium" categories of the Index of Occupational Satisfaction. Table 18 below presents esentially the same data as in Table 17, but in a slightly abbreviated form.

Table 18. Association between occupational status and satisfaction with the occupation (revised)

Index of Occupational Satisfaction	Occupational Status			
	Low	Medium	High	Total
Low or medium	45%	67%	59%	57%
High	55	33	41	43
Total	100	100	100	100
Number of Cases	(87)	(85)	(88)	(260)

$X^2 = 8.921$ d.f. = 2 $P < .02$ $\bar{C} = .263$

In the light of the above evidence, we cannot accept the hypothesis in its present form. But before rejecting the hypothesis, let us examine the relationship between occupational satisfaction and some of the other independent variables discussed in Chapter III. Table 19 shows the relationships between occupational satisfaction and other independent variables. Age and number of children are positively related to occupational satisfaction, whereas both caste status and level of education bear an inverse relationship with occupational satisfaction.

Table 19. Association between occupational satisfaction and some independent variables

Relationship Between Occupational Satisfaction and ...	X^2	d.f.	P	$\bar{C}$
1. Age (positive)	5.115	2	<.10	.203
2. Number of Children (positive)	5.304	2	<.10	.206
3. Caste (negative)	9.513	2	<.01	.328
4. Education (negative)	10.841	2	<.01	.292

Compared to age and number of children, caste and education are more strongly related to occupational satisfaction. But since all four of these variables are inter-related, and also because the direction of their inter-relationships is the same as indicated in Table 19 above, it appears that in this "area" of worker satisfaction it is level of education that is contributing to the relationship under discussion. Thus, as the level of education increases, satisfaction with one's occupation decreases. It may be recalled that a higher proportion of workers with higher education

are high caste Hindus who are relatively young and, if married, have fewer children.

The fact that education is inversely related to occupational satisfaction is indirectly confirmed by the negative relationships between occupational satisfaction, on the one hand, and each of caste status and occupational status, on the other. Table 20 presents data showing inter-relationships of these six variables. If we examine this table closely we will discover that education is more strongly related to all other variables than any other. The more highly educated workers are found in high status jobs in Premier. These workers come from upper castes if they are Hindus. Usually, they are young and have fewer children if married. Such workers are typically dissatisfied with their occupation.

In order to further specify the conditions under which occupational status is related to occupational satisfaction, if at all, we introduced each of the four factors that were found to be related to occupational satisfaction. The results of this analysis are presented in Tables 21 through 24. These tables show that the relationship between occupational status and occupational satisfaction holds only for workers who have fewer or no children (including the unmarried) and for those who have low education. Among the workers who have three or more children or those with higher education, therefore, the occupational status of a worker does not seem to affect his satisfaction with the present occupation. It may be pointed out, however, that the said relationship among the workers with lower education is rather weak ($P < .10$), compared to that among workers with fewer children. In other words, we have greater

Table 20. Interrelationships among occupational satisfaction and some other variables*

		Occup. Status 1	Age 2	Children 3	Caste 4	Education 5	Occup. Satisfaction 6
Occup. Status	1	-	(-).281	n.s.	n.s.	.330	(-).273
Age	2		-	.754	(-).229	(-).633	n.s.
No. of Children	3			-	(-).254	(-).613	n.s.
Caste Status	4				-	.460	(-).328
Education	5					-	(-).292
Occup. Satisfaction	6						-

*The statistic used in this table is Contingency Coefficient, $\bar{C}$, after correction. Except where otherwise indicated by "n.s." (not significant), all relationships as depicted in the table are significant at .05 level or better. The sign (-) means that the relationship between the two variables is inverse.

Table 21. Occupational status and occupational satisfaction with age held constant

Index of Occupational Satisfaction	YOUNG				OLD			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	26%	38%	25%	30%	24%	17%	21%	21%
Medium	24	33	38	32	12	41	29	26
High	50	29	37	38	64	42	50	53
Total	100	100	100	100	100	100	100	100
Number of Cases	(54)	(61)	(60)	(175)	(33)	(24)	(28)	(85)
	$X^2 = 7.048$ $P < .20$ d.f. = 4				$X^2 = 6.516$ $P < .20$ d.f. = 4			

Relationship between:	1) Occupational Status and Occupational Satisfaction	$X^2 = 10.979$ $P < .05$ d.f. = 4	$\bar{C} = .273$
	2) Occupational Status and Age	$X^2 = 11.779$ $P < .02$ d.f. = 4	$\bar{C} = .281$
	3) Age and Occupational Satisfaction	$X^2 = 5.115$ $P < .10$ d.f. = 2	$\bar{C} = .203$

Table 22. Association between occupational status and occupational satisfaction, according to number of children

Index of Occupational Satisfaction	TWO OR FEWER CHILDREN				THREE OR MORE CHILDREN			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	30%	34%	28%	31%	18%	24%	17%	19%
Medium	17	38	34	30	23	28	36	29
High	53	28	38	39	59	48	47	52
Total	100	100	100	100	100	100	100	100
Number of Cases	(53)	(64)	(58)	(175)	(34)	(21)	(30)	(85)
	$X^2 = 9.573$ $P < .05$ d.f. = 4 $\bar{C} = .309$				$X^2 = 1.866$ $P < .90$ d.f. = 4			

Relationship between:

1) Occupational Status and Occupational Satisfaction — $X^2 = 10.979$ $P < .05$ d.f. = 4 $\bar{C} = .273$

2) Occupational Status and Number of Children — $X^2 = 3.927$ $P < .20$ d.f. = 2

3) Number of Children and Occupational Satisfaction — $X^2 = 5.304$ $P < .10$ d.f. = 2 $\bar{C} = .206$

Table 23. Occupational status and occupational satisfaction, controlling for caste

Index of Occupational Satisfaction	LOWER CASTES				UPPER CASTES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	27%	35%	14%	25%	27%	31%	35%	31%
Medium	14	18	24	18	23	44	37	35
High	59	47	62	57	50	25	28	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(22)	(17)	(21)	(60)	(34)	(39)	(46)	(119)
	$X^2 = 2.744$ $P < .90$ d.f. = 4				$X^2 = 6.412$ $P < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Occupational Satisfaction $X^2 = 10.979$ $P < .05$ d.f. = 4 $\bar{C} = .273$

2) Occupational Status and Caste $X^2 = 1.053$ $P < .90$ d.f. = 2

3) Caste and Occupational Satisfaction $X^2 = 9.513$ $P < .01$ d.f. = 2 $\bar{C} = .328$

Table 24. Occupational status and occupational satisfaction, according to level of education of worker

Index of Occupational Satisfaction	LOW EDUCATION				HIGH EDUCATION			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	23%	21%	22%	22%	31%	40%	26%	33%
Medium	16	42	27	26	30	30	46	36
High	61	37	51	52	39	30	28	31
Total	100	100	100	100	100	100	100	100
Number of Cases	(64)	(38)	(49)	(151)	(23)	(47)	(39)	(109)
	$X^2 = 9.233$ $P < .10$ d.f. = 4 $\bar{C} = .325$				$X^2 = 3.904$ $P < .50$ d.f. = 4			

Relationship between:	1) Occupational Status and Occupational Satisfaction	$X^2 = 10.979$ $P < .05$ d.f. = 4	$\bar{C} = .273$
	2) Occupational Status and Education	$X^2 = 14.124$ $P < .001$ d.f. = 2	$\bar{C} = .330$
	3) Education and Occupational Satisfaction	$X^2 = 10.841$ $P < .01$ d.f. = 2	$\bar{C} = .292$

confidence in suggesting that the original relationship holds only in the latter case (fewer children) than in the former (lower education).

Tables 21 and 23 will show that when age and caste are introduced as the "control" variables the original relationship between occupational status and occupational satisfaction disappeared in each case! In other words, occupational status is not related to satisfaction with the present occupation either among the young or the old, nor among the lower caste or upper caste workers.

The negative relationship between occupational status and occupational satisfaction (Tables 17 and 18) and the findings in Tables 21 through 24 cast a strong doubt on accepting the hypothesis that it is indeed the occupational status of a worker that affects his satisfaction or dissatisfaction with the present occupation. It appears that whatever relationship is found between those two variables is perhaps caused by some other variable(s) that affect(s) them both. If we examine occupational satisfaction in terms of mobility orientation of the worker, it would appear that those who are upwardly mobile are less satisfied with their present occupation. Attempts were made to probe further the variety of situations in which occupational status was inversely related to occupational satisfaction. It turned out that most of those situations pointed in the direction of the pattern of occupational mobility of the worker. Table 25 summarizes some of those situations.

It may be recalled from our discussion in the previous chapter that the workers with the above characteristics are the ones more recently recruited who are, typically, working in the production

departments as machine operators. For most of these workers their present occupation represents the highest point in terms of upward occupational mobility. But since they entered the firm relatively recently and also because they do not have prior experience in industrial-manufacturing occupations, most of them are earning lower wages. The company has classified these workers as "semi-skilled". Among such middle-status workers, therefore, we find a negative relationship between occupational status and occupational satisfaction.

Table 25. Characteristics of the workers among whom occupational status is inversely related to satisfaction with the present occupation

Characteristics of the Workers	X^2	d.f.	P	$\bar{C}$
1. Low Wages	19.729	4	< .001	.465
2. Non-Industrial/Manufacturing Background	12.399	4	<.02	.375
3. Low Seniority in Premier	11.755	4	<.02	.347
4. Fewer Children	9.573	4	<.05	.309
5. Married	10.423	4	<.05	.294
6. Upwardly Mobile in the Past	10.008	4	<.05	.355
7. Semi-Skilled (As Per Company's Classification)	15.607	4	<.01	.466

More than anything else it is the disrepancy between their status and wages that seems to made this group dislike their present occupation. The present hiring policy of the firm being what it is, a new recruitee is usually hired as an unskilled or a semi-skilled worker, but seldom as a skilled worker. There is, however,

hardly any difference in the starting wages of an unskilled and a semi-skilled worker. It is only after a number of years of employment in the firm, that is, after a semi-skilled worker has earned several annual increments, that his wages begin to show a marked difference from those of an unskilled worker. Before that happens, the newly-recruited worker, who has the characteristics being discussed here, is generally dissatisfied with the fact that his wages are not commensurate with his occupational activities.

The findings in this section, among other things, suggest that a worker responds differently to the different "areas" of his work experience. We found, for example, that worker satisfaction with the industrial sector of employment is influenced by factors other than those that influence his satisfaction with the present occupation. It is possible that a worker who is satisfied with his situs is at the same time dissatisfied with his occupation, and vice versa.

As the foregoing analysis shows, the hypothesis that occupational status is positively related to occupational satisfaction does not find support in this case. Our finding of a negative relationship between these two variables is not only at variance with the theory being examined here but also with the existing evidence on this subject. Faced with this contradiction, therefore, we set out to re-examine our measure of occupational satisfaction. The index of occupational satisfaction, it may be recalled, is based on the following two items which were found to be positively related to each other:

1. Is there anything that you do not like about your present occupation?

2. On the whole, how satisfied do you feel about being a factory worker?

In spite of the fact that the above two items are positively related to each other, each item seems to product a slightly different pattern of responses when related to other factors. While responses to the first item (anything you disliked about the present occupation?) were found to be related to most of the independent variables discussed in Chapter III, the responses to the second item (whether satisfied as a factory worker?) are related to none of them! It is conceivable, therefore, that the second item (which, unlike the first item, is a direct question) either does not elicit the "occupational satisfaction" or fails to obtain uniform responses from the workers studied. Any relationship that we found between index of occupational satisfaction and other variables, as discussed in the foregoing pages, was undoubtly the function of only one (the first) of the two items that constitute that index. We decided under the circumstances to use only the first of the two items in order to re-examine the relationship between occupational satisfaction and other variables.

A worker's satisfaction with his present occupation (as measured through his response to the indirect question "Is there anything you do not like about your present occupation?") is related to the several factors mentioned below:

Occupational Satisfaction is positively related to:	Occupational Satisfaction is negatively related to:
1. Wages	1. Occupational Status
2. Age	2. Religion
3. Seniority	3. Education
4. Number of Children	4. Occupational Background

Thus, while wages, age and the related factors like seniority and number of children account for a positive relationship with occupational satisfaction, the other four variables are inversely related to occupational satisfaction. These findings are essentially in agreement with those already reported in this section, that is, when the two-item index was used to measure occupational satisfaction. This is so because the relationship between index of occupational satisfaction and other variables, as already noted, was in fact being produced by the single item used in the revised measure.

We may conclude from the foregoing that revising our measure of occupational satisfaction, that is, using a single item instead of the two-item index, has not altered either the strength or the nature of the relationship between occupational satisfaction and other variables. We must reject the hypothesis that occupational status of a worker is positively related to his satisfaction with the present occupation.

4. Occupational Aspirations

Here we propose to test the hypothesis that occupational status is positively related to occupational aspirations. Although occupational aspirations do not directly constitute "work experience", which is the subject of this chapter, the level of occupational aspirations does provide an indirect measure of a worker's satisfaction with his occupation. Thus, for example, a satisfied worker is expected to have high aspirations concerning his occupational future, while the dissatisfied worker will probably manifest his dissatis-satisfaction through a low level of occupational aspirations. The

following two items were used to construct an index of occupational aspirations:

1. What is the highest job you think you can get in this company?
   - same as at present
   - group leader/ highest pay in the present grade
   - supervisor, foreman or above

2. How much do you think it would pay (per month)?
   - same as at present
   - up to Rupees 300 per month
   - between Rupees 300 and 400 per month
   - over Rupees 400 per month

The above two items were found to be positively related to each other.[9] That is, the workers who aspired to become foremen some day were generally the same who aspired for higher wages, and vice versa. The index of occupational aspirations based on these two items yielded six score types, 0 through 5, which were grouped into three categories as follows:

Index of Occupational Aspirations	Number of Cases
Low (scores 0, 1)	61
Medium (scores 2, 3)	91
High (scores 4, 5)	103
Total	255

We found Premier workers having generally high occupational aspirations, which is probably a function of the high wages and the prestige of the firm they work for. But Lambert found more or less the same level of occupational aspirations among the Poona workers, at least for one of the five factories that he studied. The first of the two items included in our index of

9. The relationship between the two items is: $X^2 = 132.501$; d.f. = 2; $P < .001$; $C = .852$

occupational aspirations is the same as the one used by Lambert in his study, that is, "What is the highest job you think you can get in this fatory?" Lambert found that the aspirations level of workers varied from factory to factory, but that it was the highest for the most modern and technologically more advanced of the five factories, that is, the engine factory. The level of occupational aspirations as obtained for the workers we studied is compared below with Lambert's findings in Poona:

Level of Occupational Aspirations	Premier Workers	Poona Workers (Lambert)[10]	
		Engine Factory	All Factories
Supervisor	35.4%	35.9%	24.4%
Higher P & M rank	40.5	16.5	13.2
Same rank	24.1	47.6	62.4
Sample size	(257)	(103)	(3,850)

The relationship between occupational status and occupational aspirations is shown in Table 26. The proportion of those with "high" occupational aspirations is 27 percent among the low-status workers, compared to 61 percent among the high-status workers. Thus, in this case, our findings support the hypothesis that the higher the occupational status of a worker, the higher will be his occupational aspirations.

Since occupational status is related to a number of variables like wages, education, age, etc., it is to be expected that a number of those variables would also be related to occupational aspirations. Of the twelve variables discussed in Chapter III occupational aspirations were found to be related to the following six which are presented in Table 27.

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10. Lambert, op. cit., p. 185.

Table 26. Occupational status and occupational aspirations

Index of Occupational Aspirations	Occupational Status			
	Low	Medium	High	Total
Low ...	30%	27%	15%	24%
Medium ...	43	40	24	36
High ...	27	33	61	40
Total ...	100	100	100	100
Number of Cases ...	(86)	(82)	(87)	(255)

$X^2 = 28.853$ d.f. = 4 $P < .001$ $\bar{C} = .396$

Table 27. Association between occupational aspirations and some other variables

Relationship Between Occupational Aspirations and ...	X^2	d.f.	P	$\bar{C}$
1. Wages (positive)	14.205	2	<.001	.335
2. Age (negative)	19.136	2	<.001	.385
3. Religion (positive)	10.147	2	<.01	.285
4. Seniority (positive)	9.593	2	<.01	.277
5. Education (positive)	17.172	2	<.001	.366
6. Rural-Urban Background (positive)	12.166	2	<.01	.357

Except for age (which is inversely related to occupational aspirations) the relationships between occupational aspirations and the other variables under discussion are positive. Thus, workers with high occupational aspirations are either earning higher wages, are Hindus, have more seniority in Premier, have

higher education, come from urban background, or are in high status jobs. But such workers are, typically, young which accounts for the negative relationship between age and occupational aspirations.

It has already been noted that occupational status is negatively related to age. In other words, a higher proportion of younger workers are in high status jobs in the factory. And occupational status is positively related to each of the following variables: wages, education, and rural-urban background. In view of this, the relationship between occupational status and occupational aspirations could be caused by any one or more of these other variables - namely, wages, age, education, and rural-urban background. There is no relationship between occupational status and religion or seniority. The fact that both religion and seniority are positively related to occupational aspirations is probably because religion and seniority are associated with age, education, and rural-urban background. In other words, Hindus are typically younger and have more education. Most of the Hindu workers, however, come from rural background, which according to our findings should account for a lower level of occupational aspirations. Since the Hindu workers have relatively higher level of aspirations than the non-Hindus in spite of the fact that a higher proportion of them comes from rural background, it probably is their higher level of education (rather than rural-urban background) which is responsible for high aspirations among this group. The inter-relationships of all these eight variables, including the dependent variable "occupational aspirations," are presented in Table 28.

Table 28. Interrelationships among occupational aspirations and some of other variables*

		Occ. Status 1	Wages 2	Age 3	Religion 4	Seniority 5	Educ. 6	Rur-Urb. 7	Occ. Asprs. 8
Occupational Status	1	-	.360	(-).281	n.s.	n.s.	.330	.352	.399
Wages	2		-	.644	n.s.	.833	(-).368	.356	.335
Age	3			-	n.s.	.653	(-).633	n.s.	(-).385
Religion	4				-	n.s.	.294	(-).229	.285
Seniority	5					-	(-).484	n.s.	.277
Education	6						-	n.s.	.366
Rural-Urban Background	7							-	.357
Occupational Aspirations	8								-

*The statistic used in this table is Contingency Coefficient, C, after correction. Except where otherwise indicated by "n.s." (not significant) all relationships as depicted in this table are significant at .05 level or better. The sign (-) means that the relationship in question is inverse.

The relationship between occupational status and occupational aspirations was examined by introducing, as "controls", each of the six other variables that were found to be related to occupational aspirations. The results of that three-dimensional analysis are shown in Tables 29 through 34. The original relationship between occupational status and occupational aspirations was found to be "independent" of wages, age, seniority, and level of education. In other words, even when we held each of those four variables constant the original relationship persisted. We may conclude from this that even though occupational status is related to each of the four factors (wages, age, seniority, and education) and to some extent is a reflection of those very same factors, its impact on the level of occupational aspirations of workers is more or less independent of those factors. Thus, the workers who are in high-status jobs have higher occupational aspirations regardless of their wages, age, length of employment, or level of education.

A few qualifications to the above general statement may be in order here. We noted before that age was inversely related to occupational aspirations. This was because a higher proportion of the younger workers happened to be in high status jobs. When controlled for age, therefore, we found that occupational status is positively related to occupational aspirations for both the younger and the older workers. But the original relationship was found to be stronger among the younger workers, compared to the older workers. Thus, it appears that although with the introduction of age as the "test" factor the original relationship between

Table 29. Occupational status and occupational aspirations with wages held constant

Index of Occupational Aspirations	LOW WAGES				HIGH WAGES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	29%	21%	18%	23%	36%	38%	13%	25%
Medium	49	51	27	45	28	21	22	23
High	22	28	55	32	36	41	65	52
Total	100	100	100	100	100	100	100	100
Number of Cases	(59)	(53)	(33)	(145)	(28)	(29)	(54)	(111)
	$X^2 = 11.595$ $P < .05$ d.f. = 4 $\bar{C} = .369$				$X^2 = 10.540$ $P < .05$ d.f. = 4 $\bar{C} = .398$			

Relationship between:

1) Occupational Status and Occupational Aspirations — $X^2 = 28.853$ $P < .001$ d.f. = 4 $\bar{C} = .396$
2) Occupational Status and Wages — $X^2 = 17.011$ $P < .001$ d.f. = 2 $\bar{C} = .360$
3) Wages and Occupational Aspirations — $X^2 = 14.205$ $P < .001$ d.f. = 2 $\bar{C} = .335$

Table 30. Occupational status and occupational aspirations, according to age of worker

Index of Occupational Aspirations	YOUNG				OLD			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	20%	19%	10%	16%	49%	48%	26%	41%
Medium	48	51	23	41	33	13	26	25
High	32	30	67	43	18	39	48	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(54)	(59)	(60)	(173)	(33)	(23)	(27)	(83)
	$\underline{X}^2 = 20.458$ P <.001 d.f. = 4 $\bar{C} = .440$				$\underline{X}^2 = 8.650$ P <.10 d.f. = 4 $\bar{C} = .416$			

Relationship between:

1) Occupational Status and Occupational Aspirations — $X^2 = 28.853$ P <.001 d.f. = 4 $\bar{C} = .396$

2) Occupational Status and Age — $X^2 = 11.779$ P <.02 d.f. = 4 $\bar{C} = .281$

3) Age and Occupational Aspirations — $X^2 = 19.136$ P <.001 d.f. = 2 $\bar{C} = .385$

Table 31. Association between occupational status and occupational aspirations with religion held constant

Index of Occupational Aspirations	NON HINDUS				HINDUS			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	35%	32%	23%	31%	29%	24%	12%	21%
Medium	39	47	45	43	44	37	17	32
High	26	21	32	26	27	39	71	47
Total	100	100	100	100	100	100	100	100
Number of Cases	(31)	(28)	(22)	(81)	(56)	(54)	(65)	(175)
	$X^2 = 1.452$ $P < .90$ d.f. = 4				$X^2 = 25.402$ $P < .001$ d.f. = 4 $\bar{C} = .482$			

Relationship between:

1) Occupational Status and Occupational Aspirations — $X^2 = 28.853$ $P < .001$ d.f. = 4 $\bar{C} = .396$

2) Occupational Status and Religion — $X^2 = 2.738$ $P < .30$ d.f. = 2

3) Religion and Occupational Aspirations — $X^2 = 10.147$ $P < .01$ d.f. = 2 $\bar{C} = .285$

Table 32. Occupational status and occupational aspirations, according to seniority of worker

Index of Occupational Aspirations	LOW SENIORITY				HIGH SENIORITY			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	26%	22%	16%	22%	40%	39%	13%	29%
Medium	49	51	25	42	30	13	24	23
High	25	27	59	36	30	48	63	48
Total	100	100	100	100	100	100	100	100
Number of Cases	(57)	(59)	(49)	(165)	(30)	(23)	(38)	(91)
	$X^2 = 17.261$ $P < .01$ d.f. = 4 $\bar{C} = .417$				$X^2 = 10.875$ $P < .05$ d.f. = 4 $\bar{C} = .443$			

Relationship between:	1) Occupational Status and Occupational Aspirations	$X^2 = 28.853$	$P < .001$ d.f. = 4	$\bar{C} = .396$
	2) Occupational Status and Seniority	$X^2 = 9.679$	$P < .05$ d.f. = 4	$\bar{C} = .256$
	3) Seniority and Occupational Aspirations	$X^2 = 9.593$	$P < .01$ d.f. = 2	$\bar{C} = .277$

Table 33. Association between occupational status and occupational aspirations by educational level

Index of Occupational Aspirations	LOW EDUCATION				HIGH EDUCATION			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	36%	42%	19%	32%	17%	15%	10%	14%
Medium	48	30	29	38	26	48	18	32
High	16	28	52	30	57	37	72	54
Total	100	100	100	100	100	100	100	100
Number of Cases	(64)	(36)	(48)	(148)	(23)	(46)	(39)	(108)
	$\underline{X}^2 = 19.480$ P <.001 d.f. = 4 $\bar{C} = .462$				$\underline{X}^2 = 11.619$ P <.05 d.f. = 4 $\bar{C} = .423$			

Relationship between:

1) Occupational Status and Occupational Aspirations — $X^2 = 28.853$ P <.001 d.f. = 4 $\bar{C} = .396$
2) Occupational Status and Education — $X^2 = 14.124$ P <.001 d.f. = 2 $\bar{C} = .330$
3) Education and Occupational Aspirations — $X^2 = 17.172$ P <.001 d.f. = 2 $\bar{C} = .366$

Table 34. Occupational status and occupational aspirations by rural-urban background

Index of Occupational Aspirations	RURAL BORN				URBAN BORN			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	31%	22%	10%	23%	40%	32%	19%	29%
Medium	54	56	31	48	15	33	22	24
High	15	22	59	29	45	35	59	47
Total	100	100	100	100	100	100	100	100
Number of Cases	(48)	(23)	(29)	(100)	(20)	(34)	(37)	(91)
	$\chi^2 = 18.555$ $P < .001$ d.f. = 4 $\bar{C} = .537$				$\chi^2 = 6.245$ $P < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Occupational Aspirations — $\chi^2 = 28.853$ $P < .001$ d.f. = 4 $\bar{C} = .396$

2) Occupational Status and Rural-Urban Background — $\chi^2 = 12.185$ $P < .01$ d.f. = 2 $\bar{C} = .352$

3) Rural-Urban Background and Occupational Aspirations — $\chi^2 = 12.166$ $P < .01$ d.f. = 2 $\bar{C} = .357$

occupational status and occupational aspiration does not disappear, it does seem to hold more strongly for the younger workers. Age to some extent has a depressing effect upon the original relationship.

When religion is held constant, the relationship between occupational status and occupational aspirations disappears for the non-Hindu workers. We already know that compared with the Hindus, the non-Hindu workers in Premier are slightly older. It is because of their age, rather than their religious affiliation, that the non-Hindu workers do not exhibit the same pattern of relationship as the Hindu workers.

Like religion, rural-urban background also affects the relationship between occupational status and occupational aspirations. The original relationship does not hold for the urban-born workers. Since a higher proportion of the urban born are non-Hindus, and older persons, it is not surprising that the relationship between occupational status and occupational aspirations does not hold for the urban-born workers. Here again it is age, rather than birthplace, that acts as a depressant to the original relationship.

In addition to the six variables discussed above, a few others were introduced as "control" variables to further test the relationship between occupational status and occupational aspirations. We found that the original relationship is "independent" of such factors as occupational background (industrial/non-industrial), life orientation (family or religion - career or union), or occupational mobility in the past. In each of these cases we found the original relationship remained essentially unaltered. We therefore accept the hypothesis that occupational status has a definite,

positive effect on the level of occupational aspirations of workers. Of the several factors that were introduced as "controls", only age seemed to affect the original relationship in that the relationship was generally stronger among the younger workers.

Although occupational status seems to have a decisive impact on the level of occupational aspirations of a worker, and even though this impact is essentially uninfluenced by such factors as wages, age, religion, seniority, education, and rural-urban background, it is still to be expected that these latter variables have some bearing on the relationship between occupational status and occupational aspirations. This assumption is based on the fact that both occupational status and occupational aspirations are related to each of the six factors listed above.

Our subsequent analysis involved cross-tabulating occupational aspirations against each of the six factors, <u>when occupational status is held constant</u>. If any of these factors is related to occupational aspirations <u>independently of occupational status</u>, it is to be expected that the relationship would hold for workers at different status levels. In other words, breaking the sample into three groups (low, medium, and high status workers) should not remove the relationship between, say, wages and occupational aspirations, that is, if that relationship is "independent" of the effect of occupational status.

Our findings revealed that when controlled for occupational status the relationship between wages and occupational aspirations disappeared among both the low-status and high-status workers while a <u>negative</u> relationship was found for the middle status group. The

relationship between religion and occupational aspirations holds only for the high-status workers, while that between rural-urban background and occupational aspirations survives only for the low-status workers. Similarly, it is only among the middle status workers that seniority is related to occupational aspirations. The positive relationship between education and occupational aspirations and the negative relationship between age and occupational aspirations are applicable only in the case of low status and medium status workers, but not to the high status craftsmen.

While it would be of interest to explain each of the several situations indicated above, such an explanation is outside the scope of this study. For the purposes in hand, it should suffice to say that whereas occupational status contributes to occupational aspirations more or less independently of the six other factors, the latter too are significant variables in any study of occupational aspirations. And, also, while each of those six factors is generally independent of the other five, none of them is completely independent of occupational status in so far as its relation to occupational aspirations is concerned. In other words, the interdependence between occupational status on the one hand and each of the six other correlates of occupational aspirations on the other is essentially one-way, for while the latter are dependent on the former the reverse is not true.

In the course of our attempts to determine the relative importance of the six background and occupational variables, vis-a-vis one another, it was discovered that religion had some conditioning effect upon the influence of the other five factors in

shaping the occupational aspirations of workers. Although it is not directly relevant to the purposes in hand, this one case proved rather enigmatic and hence worth reporting here. Religion, it may be recalled, is positively related to occupational aspirations. That is, the Hindus compared to the non-Hindus have higher occupational aspirations. Similarly, each of the other six factors (including occupational status) is also related to occupational aspirations. But, interestingly, the relationship between occupational aspirations and any of the other six factors (i.e., occupational status, wages, age, seniority, education, and rural-urban background) holds only among the Hindu workers, when controlled for religion.

The question that remains to be answered is: Why does the relationship between occupational aspirations and each of the other factors disappear among the non-Hindu workers? The non-Hindus in Premier have more seniority and a greater proportion of them are urban born. On each of these two counts the non-Hindu workers should have higher occupational aspirations, compared to the Hindus. But, it may be recalled that the non-Hindus, typically, are older and have less education than the Hindus. For the latter two reasons, the non-Hindus will have lower aspirations than the Hindu workers. Since all these four characteristics are generally found in the very same persons, the effect of the "positive" factors is apparently cancelled out by the "negative" factors and, therefore, among the non-Hindu workers it is hard to predict their occupational aspirations on the basis of any of the factors found to be associated with occupational aspirations either for the Hindus or the sample as a whole.

5. Job Satisfaction

Our final "area" of worker satisfaction relates to the actual job of the respondent at the time of this study. Compared to the other "areas", this one is perhaps the most specific and of special interest. We want to test the hypothesis that occupational status is positively related to job satisfaction.

The following three questions were used to obtain data on job satisfaction:

1. Is there anything that you do not like about your present job? (Yes - No)

2. On the whole, how do you feel about the work you are actually doing? (Dissatisfied - Neither - Satisfied)

3. Would you like, without a change in pay, to change your actual operations in the factory every once in a while? (Yes - No)

Each of the three items was found to be associated with the other two at .05 level or better.[11] Hence, an index of job satisfaction was constructed by combining the responses of each worker to the three items. The index yielded four score types, 0 through 3, which were grouped into "low", "medium", and "high" as follows:

Index of Job Satisfaction	Number of Cases
Low (scores 0, 1)	88
Medium (score 2)	97
High (score 3)	75
Total	260

11. The relationships between the three items were:

	X^2	d.f.	P	$\bar{C}$
Association between 1 and 2:	15.681	1	<.001	.374
Association between 1 and 3:	3.877	1	<.05	.190
Association between 2 and 3:	9.934	1	<.01	.301

The relationship between occupational status and job satisfaction is presented in Table 35 which shows that these two variables are positively related to each other. Thus, the proportion of those who are least satisfied with their jobs is about two-fifths among the assemblers and only one-fifth among the craftsmen. Conversely, a slightly higher proportion of the craftsmen are highly satisfied with their jobs.

Table 35. Association between occupational status and job satisfaction

Index of Job Satisfaction	Occupational Status			
	Low	Medium	High	Total
Low	38%	45%	20%	34%
Medium	34	30	47	37
High	28	25	33	29
Total	100	100	100	100
Number of Cases	(88)	(85)	(87)	(260)

$X^2 = 13.209$ d.f. = 4 $P < .02$ $\bar{C} = .298$

In addition to occupational status, job satisfaction was also found to be positively related to wages, age, and seniority as shown in Table 36. But, we did not find any of the background factors discussed in Chapter III to affect job satisfaction.[12]

12. In a similar study of Italian automobile workers, Ammassari found that, except for age, occupational variables (e.g., skill, seniority, wages, etc.) played a greater role in job satisfaction than the socio-personal characteristics of the worker. See Paolo Ammassari, "Worker Satisfaction and Occupational Life: A Study of the Automobile Worker in Italy," Unpublished Ph.D. Dissertation, Department of Sociology, Michigan State University, 1964, p. 143.

Table 36. Association between job satisfaction and some other variables

Relationship between job satisfaction and ...	X^2	d.f.	P	$\bar{C}$
1. Wages (positive)	6.915	2	<.05	.235
2. Age (positive)	12.334	2	<.01	.311
3. Seniority (positive)	7.723	2	<.05	.248

As already discussed in Chapter III, the three variables included in Table 36 (e.g., wages, age, and seniority) are related with one another positively. Thus, the older workers who have been with the firm for a longer time than the younger workers are also earning higher wages. Since each of these three variables is positively related to job satisfaction, our next task is to find out which one (or more) is actually responsible for, or contributing most toward the relationship with job satisfaction.

Table 37 shows the interrelationship among the correlates of job satisfaction. Of the four variables that are related to job satisfaction, including occupational status, wages appear to be the most likely source of job satisfaction.

The relationship between occupational status and job satisfaction was examined by holding constant (one at a time) each of the other three variables - namely, wages, age, and seniority. As the data in Tables 38 through 40 will show, the said relationship is not independent of any of the three control variables. Whereas the original relationship holds for the younger workers or for those with low seniority, it disappears among the older workers

or for those who have been working in Premier for a longer period of time. Similarly, a weak relationship ($P < .10$) is found between occupational status and job satisfaction for the workers earning lower wages, but it disappears for those earning higher wages.

Table 37. Interrelationships among job satisfaction and some other variables*

	Occ. Status 1	Wages 2	Age 3	Seniority 4	Job Sat. 5
1. Occ. Status	-	.360	(-).281	.256	.298
2. Wages		-	.644	.833	.235
3. Age			-	.653	.311
4. Seniority				-	.248
5. Job Satisf.					-

*The statistic used in this table is Contingency Coefficient, $\bar{C}$, after correction. Each of the relationships depicted in this table is significant at .05 level or better. The sign (-) means that the relationship in question is inverse.

The above findings are consistent with those in the case of situs satisfaction. In other words, the same mechanisms that account for the relationship between technological work environment and satisfaction with the industrial sector of employment are at work in the case of satisfaction with the current job. Job satisfaction may, therefore, be viewed as a more specific case of the rather general response to the sector of employment. In both cases, the relationship between occupational status and satisfaction holds only under certain conditions - e.g., low wage groups, younger workers, or those with less seniority.

Table 38. Occupational status and job satisfaction with wages held constant

Index of Job Satisfaction	LOW WAGES				HIGH WAGES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	42%	49%	23%	41%	28%	37%	17%	25%
Medium	27	27	53	33	48	37	43	43
High	31	24	24	26	24	26	40	32
Total	100	100	100	100	100	100	100	100
Number of Cases	(59)	(55)	(34)	(148)	(29)	(30)	(53)	(112)
	$X^2 = 9.356$ $P < .10$ d.f. = 4 $\bar{C} = .331$				$X^2 = 5.325$ $P < .30$ d.f. = 4			

Relationship between:

1) Occupational Status and Job Satisfaction — $X^2 = 13.208$ $P < .02$ d.f. = 4 $\bar{C} = .298$
2) Occupational Status and Wages — $X^2 = 17.011$ $P < .001$ d.f. = 2 $\bar{C} = .360$
3) Wages and Job Satisfaction — $X^2 = 6.915$ $P < .05$ d.f. = 2 $\bar{C} = .235$

Table 39. Association between occupational status and job satisfaction, according to age of worker

Index of Job Satisfaction	YOUNG				OLD			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	51%	52%	20%	41%	15%	25%	19%	19%
Medium	25	28	48	34	49	38	44	44
High	24	20	32	25	36	37	37	37
Total	100	100	100	100	100	100	100	100
Number of Cases	(55)	(61)	(60)	(176)	(33)	(24)	(27)	(84)
	$\underline{X}^2 = 17.012$ P <.01 d.f. = 4 $\underline{C} = .402$				$X^2 = 1.100$ P <.90 d.f. = 4			

Relationship between:

1) Occupational Status and Job Satisfaction — $X^2 = 13.208$ P <.02 d.f. = 4 $\bar{C} = .298$
2) Occupational Status and Age — $X^2 = 11.779$ P <.02 d.f. = 4 $\bar{C} = .281$
3) Age and Job Satisfaction — $X^2 = 12.334$ P <.01 d.f. = 2 $\bar{C} = .311$

Table 40. Occupational status by job satisfaction, controlled for seniority

Index of Job Satisfaction	LOW SENIORITY				HIGH SENIORITY			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	47%	52%	16%	40%	19%	25%	24%	23%
Medium	30	25	50	34	42	46	43	43
High	23	23	34	26	39	29	33	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(57)	(61)	(50)	(168)	(31)	(24)	(37)	(92)
	$\chi^2 = 17.686$ $P < .01$ d.f. = 4 $\bar{C} = .419$				$\chi^2 = 0.693$ $P < .99$ d.f. = 4			

Relationship between:

1) Occupational Status and Job Satisfaction — $\chi^2 = 13.208$ $P < .02$ d.f. = 4 $\bar{C} = .298$

2) Occupational Status and Seniority — $\chi^2 = 3.975$ $P < .20$ d.f. = 2

3) Seniority and Job Satisfaction — $\chi^2 = 7.723$ $P < .05$ d.f. = 2 $\bar{C} = .248$

The fact that occupational status and the other three correlates of job satisfaction are not only related to each other but are dependent on one another (in so far as their impact on job satisfaction is concerned) was subjected to another test. Holding occupational status constant, we cross-tabulated each of wages, age, and seniority against job satisfaction. If the three correlates of job satisfaction were "independent" of occupational status, we would expect that for each occupational status group the relationship between them and job satisfaction would hold. In other words, the introduction of occupational status as a "control" should not affect the original relationship.

It was discovered through such an analysis that, when controlled for occupational status, the relationship between wages and job satisfaction disappeared completely. It may be concluded from this that the original relationship between wages and job satisfaction (that is, for the total sample) was spurious; the original relationship was probably a function of some other variable(s).

The relationship between job satisfaction on the one hand and each of age and seniority on the other does not hold for the craftsmen whereas it exists for both the assemblers and the machine operators. This should come as no surprise to us because the craftsmen are engaged in work tasks which, as already noted, provide intrinsic sources of satisfaction. These workers, in other words, need not look for extrinsic reasons in order to like their present jobs. It is only among the middle and low-status workers that such secondary reasons as age and seniority become the major sources of job satisfaction.

The third phase of our multivariate analysis aimed at discovering which of the three correlates of job satisfaction (i.e., wages, age, and seniority) is/are in fact contributing most toward worker's satisfaction with his present job. The procedure involved cross-tabulating every factor against job satisfaction when each of the other two is held constant. When either age or seniority is held constant, the relationship between wages and job satisfaction disappears completely. Similarly, when either wages or age is controlled, the relationship between seniority and job satisfaction disappears completely. It may be concluded from this that neither wages nor seniority is independent of the other two factors in its impact on job satisfaction. It is very likely that the relationship that was initially found to exist between job satisfaction and either wages or seniority was in fact the function of either occupational status or age, or both.

When the relationship between age and job satisfaction is examined through the above procedure it is discovered that it holds for the low-paid workers but not for the highly-paid workers. Similarly, the relationship between age and job satisfaction holds for those with less seniority but not for those with more seniority. The relationship between age and job satisfaction is, therefore, <u>not</u> independent of either wages or seniority for it holds only for certain wage and seniority groups and not for the others.

CHAPTER V

OCCUPATIONAL STATUS AND WORKER BEHAVIOR

Whereas the dependent variables in the preceding chapter were all attitudinal (e.g., worker satisfaction), here we propose to investigate the relationships between occupational status and certain behavior patterns of the Premier worker. The following four areas of worker behavior will be examined in relation of occupational status:

1. Attendance at Work
2. Union Involvement
3. Neighborhood Involvement
4. Cummunity Involvement

One of the basic assumptions of this study is that a person's occupational status forms a large part of his identity. If work is not the "central life interest," it is certainly one of the most important aspects of a person's identity. It follows from this assumption that an individual's occupational status will in some ways influence his involvement with both occupational and non-occupational activities. The major hypothesis to be tested is this: occupational status is positively related to worker's involvement in each of the four "areas" of activities mentioned above.

1. Attendance at Work

We expect that high-status workers will be more regular than the low-status workers in their attendance at work. That is, occupational status is expected to be positively related to attendance at work. Our measure of "attendance at work" is the attendance

ratio determined on the basis of the previous five years' attendance record for each worker interviewed, as below:

$$\text{Attendance Ratio} = \frac{\text{Actual number of days worked during previous five years}}{\text{Total number of official working days during the previous 5 years}} \times 100$$

The mean attendance ratio for the sample was found to be 83.7 percent, while the lowest and the highest proportions were 53 percent and 95 percent, respectively. Dividing the workers into "low", "medium", and "high" the following distribution was obtained:

Attendance Ratio	Number of Cases
Low (less than 83%)	91
Medium (83% - 87%)	50
High (88% - 95%)	81
Total	262

Table 41 gives data on the relationship between occupational status and attendnace at work. Apparently, there is no association between these two variables, which means that a knowledge of a worker's occupational status does not enable us to predict his rate of attendance at work.

Next, it is proposed to investigate the relationship, if any, between attendance and the other independent variables discussed in Chapter III. Except for one variable, rural-urban background, none of the twelve variables is related to attendance at work. The relationship between rural-urban background and attendance is given in Table 42.

It can be seen from this table that workers with rural background have a relatively higher rate of attendance, compared to the

urban-born. This seems to contradict the widely-held notion that the labor force of a developing society is usually tied to the village nexus and, therefore, their commitment to the urban-industrial work is marred by their frequent absences from such work. Our data show that the situation is just the opposite, that is, the urban-born workers show a relatively lower attendance rate than the rural-born.

Table 41. Relationship between occupational status and attendance at work

Attendance at Work	Occupational Status			
	Low	Medium	High	Total
Low	30%	45%	31%	35%
Medium	36	27	39	34
High	34	28	30	31
Total	100	100	100	100
Number of Cases	(88)	(85)	(89)	(262)

$X^2 = 6.166$ d.f. = 4 $P < .20$

Table 42. Relationship between rural-urban background and attendance at work

Attendance at Work (Attendance Ratio)		Rural-Urban Background		
		Rural	Urban	Total
Low	...	24%	46%	35%
Medium	...	44	27	36
High	...	32	27	29
Total	...	100	100	100
Number of Cases	...	(104)	(93)	(197)

$X^2 = 11.501$ d.f. = 2 $P < .01$ $C = .343$

It may be recalled from our discussion in Chapter III that the rural-born workers, typically, have less seniority in Premier, earn lower wages, and work in low-status jobs and departments of the factory. All these factors suggest that these workers, compared to the urban-born, have had relatively less exposure to the industrial-manufacturing sector of employment and are, therefore, at the lower rungs of the occupational hierarchy. To the extent that regularity in attendance at work is an index of the "commitment" of a work force (as suggested, among others, by Myers), our data show that the rural-born workers are more committed than the urban-born. We suggest, however, that it is perhaps misleading to equate high attendance at work with "commitment", for the former could occur under a variety of circumstances.

The automobile industry is among the best paid in India. It also enjoys great prestige because of the product it manufactures, the automobile. As such, the work force of this industry is likely to exhibit a high degree of satisfaction with their employment. But the more recently recruited workers are perhaps even more enchanted with their employment in an automobile plant. If a higher proportion of the newly recruited workers happen to be rural-born, as is the case in Premier, this adds a new dimension to their attachment to work in an automobile industry. Compared to the urban-born, who have relatively greater exposure to industrial-manufacturing work, the rural-born workers probably deem it a sign of upward occupational mobility. At the same time, however, the rural-born workers may lack the security and confidence of being able to find another job in the event of losing the present one. The urban-born worker,

on the other hand, having had more experience in industrial-manufacturing occupations and also having more "contacts", is likely to be much less concerned with the problems of alternative employment. And, of course, the latter has been with Premier for a longer period and has thereby gained a higher status in the occupational hierarchy, a factor that he can exploit to his advantage in such matters as taking time off the job.

We found indirect support for this argument when attendance at work was cross-tabulated against pattern of occupational mobility of each worker. An inverse relationship was found to exist between those two variables.[1]

Although for the sample as a whole occupational status is not associated with attendance at work and while rural-urban background is negatively related to attendance, among the urban-born workers (as shown in Table 43) occupational status was found to be positively related to attendance at work. Thus, the rate of attendance among the rural-born workers remains uninfluenced by their occupational status. This finding indirectly supports the argument already advanced, that is, the better attendance record of the rural born (vis-a-vis the urban born) is probably a function of their greater emphasis on job security rather than that of any particular liking for the intrinsic aspects of their occupation.

When controlled for occupational status, it is discovered that the negative relationship between rural-urban background and attendance holds only among the machine operators and not among the

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1. The relationship between pattern of occupational mobility (downward - upward) and attendance at work = $X^2 = 6.416$; d.f. = 2; $P < .05$; $\overline{C} = .225$.

Table 43. Occupational status and attendance at work, according to rural-urban background of worker

Attendance at Work	RURAL BORN				URBAN BORN			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	25%	20%	26%	24%	38%	66%	32%	46%
Medium	42	44	48	44	24	17	38	27
High	33	36	26	32	38	17	30	27
Total	100	100	100	100	100	100	100	100
Number of Cases	(48)	(25)	(31)	(104)	(21)	(35)	(37)	(93)
	$X^2 = 0.946$ P <.95 d.f. = 4				$X^2 = 9.987$ P <.05 d.f. = 4 C = .421			

Relationship between:

1) Occupational Status and Attendance at Work — $X^2 = 6.166$ P <.20 d.f. = 4

2) Occupational Status and Rural-Urban Background — $X^2 = 12.185$ P <.01 d.f. = 2 $\bar{C} = .352$

3) Rural-Urban Background and Attendance at Work — $X^2 = 11.501$ P <.01 d.f. = 2 $\bar{C} = .343$

assemblers or the craftsmen. Now the ratio of the rural born to the urban born is about the same among both the machine operators and the craftsmen; that is, three to two. And the total number of cases in those two groups is also about the same. But, in spite of this similarity, the relationship between rural-urban birthplace and attendance holds only among the machine operators.

Since the machine operators, typically, are younger and have less seniority in Premier, they differ from both assemblers and the craftsmen. But perhaps even more important is the difference in terms of level of education. The level of education among the machine operators is markedly higher than that of either the assemblers or the craftsmen. More than any other factor, it appears that the higher level of education among the machine operators (two-thirds of whom happen to be rural born) is responsible for the negative relationship between rural-urban background and attendance at work.

The above discussion suggests that (at least among the machine operators) attendance at work is influenced by a combination of rural-urban background and some other factors. This is so because a unique combination of some of these factors appears to distinguish the machine operators from the rest of the work force. Our search for such peculiarities revealed that the machine operators differ significantly, among other things, in terms of rural-urban background and religious affiliation. While the proportion of Hindus among the machine operators (e.g., 66 percent) is not markedly different from that for the total sample (which is 69 percent), great <u>internal</u> variation is revealed when rural-urban background

is held constant. For example, whereas only one-half of the urban-born machine operators are Hindus, the corresponding proportion among the rural-born machine operators is three-fourths. Moreover, the rural-born operators (in contrast to the urban-born operators) are relatively younger and have a little more education.

The critical question, then, is to find out whether it is place of birth, religious affiliation, age, education, or a combination of two or more of these factors that accounts for the higher attendance rate among the rural-born machine operators. Due to the limitations of small number of cases in the group under discussion and also because of the nature of our data, it is difficult to find an adequate answer to this question. Still, some tentative conclusions can be drawn from our analyses and the same are offered next.

We have already indicated that for the sample as a whole there is no association between attendance at work and religion, education, or age. Only rural-urban birthplace was found to be related to attendance for the total sample. It may be concluded from this evidence alone that, of the four factors, rural-urban birthplace is perhaps the most important in affecting attendance. However, when occupational status is held constant, a number of new relationships come to light. In the first place, the negative relationship between rural-urban background and attendance holds only for the machine operators and not for the total sample. Then, also, attendance at work is found to be positively related to both religion and education among the machine operators. Thus, the machine operators with better attendance record are usually Hindus, more educated,

or the rural born. Since all three of these factors are highly interrelated, it is not possible in this case (primarily because of small N) to determine the relative influence of each factor in relation to attendance.

It is also my impression that many of the urban-born machine operators had some part-time jobs, even though not all of them admitted this fact in the course of formal interviewing. And this is particularly the case with the Muslim workers, many of whom come from astisan families. Since about one-half of the urban-born machine operators are non-Hindus, it appears that some of the workers in this category are used to take time off their factory jobs in order to engage in the outside work. The workers with rural background will obviously have a handicap in finding such part-time work and, in its absence, the factory job is the only source of income for most of them. This may be another reason why the urban-born machine operators (in contrast to their rural-born counterparts) have a lower attendance rate in Premier. We suspect that some of these workers are involved in two different occupational activities: one in the factory and the other at home. It seems that, whenever possible, some of them took time off from the factory to pursue other work activities. The work in the latter category could be repairing someone's automobile at home, helping in somebody's private workshop, and the like. But we have no quantitative data to support these arguments.

Although we found no direct relationship between religion and occupational status, or between religion and attendance at work, the above discussion suggests that religion is to some extent involved

in affecting work attendance. Table 44 shows the relationship between occupational status and attendance at work when religion is held constant. Whereas among the Hindu workers the occupational status of a worker does not seem to affect his rate of attendance, there does exist such a relationship among the non-Hindu workers. Since a higher proportion of the non-Hindus are urban born, the inverse relationship between occupational status and work attendance among such workers (as shown in Table 44) is, again, a function of the part-time work activities of the medium or high status workers in this category. In other words, craftsmen and machine operators, if they are urban born or if they are non-Hindus, probably have a greater scope of being able to utilize their skills outside the plant and, therefore, they have a lower attendance rate compared to the assemblers and other routine manual workers.

Except for the two factors discussed above, that is, rural-urban background and religious affiliation, no other variable (from among the twelve discussed in Chapter III) was found to affect work attendance either directly or indirectly. Hence, we were a little disappointed for, clearly, attendance ratio was the only dependent variable for which we had absolutely reliable data taken directly from the pay rolls of the factory. Also, this variable promised to be significant not only because of its pratical importance to the industry but also from the point of view of sociological theory in that we were interested in the prediction of actual human behavior in a concrete situation on the basis of some structural factors. Unlike the other (attitudinal) variables, however, the only item we had on actual behavior proved to be rather unpredictable in this case.

Table 44. Association between occupational status and attendance at work with religion held constant

	NON HINDUS				HINDUS			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
Attendance at Work	Low	Medium	High	Total	Low	Medium	High	Total
Low	26%	59%	45%	43%	32%	38%	25%	31%
Medium	32	31	41	34	38	25	39	35
High	42	10	14	23	30	37	36	34
Total	100	100	100	100	100	100	100	100
Number of Cases	(31)	(29)	(22)	(82)	(57)	(56)	(67)	(180)
	$\underline{X}^2 = 11.876$ $P < .02$ d.f. = 4 $\underline{C} = .482$				$X^2 = 4.095$ $P < .50$ d.f. = 4			

Relationship between:

1) Occupational Status and Attendance at Work — $X^2 = 6.166$ $P < .20$ d.f. = 4
2) Occupational Status and Religion — $X^2 = 2.738$ $P < .30$ d.f. = 2
3) Religion and Attendance at Work — $X^2 = 4.489$ $P < .20$ d.f. = 2

While we do not accept the notion of human behavior being completely unique in every case (and hence unpredictable), our findings do point to the immense complexity involved in any scientific endeavor designed to predict behavior in concrete situations. Of course, there are several weaknesses in our approach in the present case. While we do have reliable data on the actual attendance rate of the workers interviewed, we have no information as to the "reasons" for absence from work. It seems that the more important thing to study is not attendance at work but absence from work and that for the study of the latter problem we must have worker's reasons for absenteeism.

We would expect that work satisfaction is positively related to attendance at work. But our findings show no such relationship. In other words, the attendance ratio among the satisfied workers is no higher or lower compared to the dissatisfied workers. This is true no matter what index of worker satisfaction is used in relation to attendance rate. Rather than suggesting that, on the basis of these findings, the sociological studies of worker satisfaction seem irrelevant as far as worker behavior is concerned, we maintain that the behavior under study should be measured in terms of absence from work along with the reasons therefor. If we find that absenteeism, too, is unpredictable, we would perhaps be justified in calling into question the propriety of doing studies of worker satisfaction.

Of the many independent and dependent variables used in this study, attendance was found to be related (besides rural-urban background and religious affiliation) only to union involvement.

It was discovered that a higher proportion of workers actively involved in the activities of their union had a higher attendance rate, compared to those who are less involved in such activities.[2] This finding should be of interest to the social scientists, the management, and the union leaders, for it seems to destroy the notion that active union participation is a manifestation of worker's discontent with the management and its policies. We maintain that workers' interest in unions and their participation in union activities need not be seen as a reflection of such discontent. As our data show, union involvement probably contributes in a positive way toward socialization of the industrial worker into the industrial system. While this may not necessarily be the explicit objective of unions, they do seem to inculcate in their membership an understanding of the processes that link the management, the union, and the workers with one another. Hence, it seems that, aside from other functions, union involvement does contribute in a positive way to bring about regularity of behavior expected of an industrial worker.

2. Union Involvement

We expect that occupational status is positively related to union involvement. This hypothesis is based on the assumption that the high-status workers being also more educated and earning higher wages are usually more likely to participate in formal associations, including unions. Membership of a union is not obligatory for the

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2. The relationship between:
   (a) union interest and attendance: $X^2 = 11.382$; d.f. = 4; $P < .05$; $\bar{C} = .279$
   (b) union participation and attendance: $X^2 = 10.049$; d.f. = 4; $P < .05$; $\bar{C} = .279$

Premier work force and it should, therefore, be of interest to know who joins a union and, among the union members, who are more active in their involvement with union activities.

We have two different measures of union involvement: (1) expressed interest in unions in general and (2) participation in union activities. The following question was used as an index of union interest:

> "Would you tell me how interested you are in unions in general?
> - not at all."
> - a little."
> - average."
> - very much."

The distribution of workers in terms of their responses to the above question is below:

Index of Union Interest	Number of Cases
Low (not at all/a little)	79
Medium (average)	96
High (very much)	87
Total	262

The relationship between occupational status and union interest is shown in Table 45. A relatively weak relationship seems to exist between these two variables. But the direction of the relationship is quite opposite from what was expected. As the association between occupational status and union interest, as reavealed by our data, is neither very significant nor consistent, we fail to find support for the hypothesis in this case.

Of the several independent variables discussed in Chapter III, the following were found to be related to union interest: (1) religion, (2) education, (3) occupational background, and (4) marital

status. Thus, the proportion of workers highly interested in union in general was found to be relatively higher among the (1) Hindus, (2) more educated, (3) workers with non-agricultural occupational background, and (4) unmarried. Table 46 shows the degree of relationships between these several independent variables and union interest.

Table 45. Occupational status and union interest

Index of Union Interest	Occupational Status			
	Low	Medium	High	Total
Low	27%	29%	34%	30%
Medium	38	46	27	37
High	35	25	39	33
Total	100	100	100	100
Number of Cases	(88)	(85)	(89)	(262)

$X^2 = 7.865$ d.f. = 4 $P < .10$ $\bar{C} = .231$

Table 46. Association between union interest and some independent variables

Relationship between union interest and ...	X^2	d.f.	P	$\bar{C}$
1. Religion (Hindu/Non-Hindu	7.967	2	$<.02$	.251
2. Education	22.526	2	$<.001$	.411
3. Occupational Background	9.646	4	$<.05$	.271
4. Marital Status	8.474	2	$<.02$	.258

Many of the correlates of union interest mentioned above, including occupational status, are of course related to each other.

Their interrelationships are shown in Table 47 below.

Table 47. Interrelationships among the correlates of union interest*

	Occ. Status 1	Religion 2	Educ. 3	Occ. Bgd. 4	Mar. Stat. 5	Uni. Intr. 6
1. Occ. Status	-	n.s.	.330	.382	n.s.	n.s.
2. Religion		-	.294	n.s.	(-).208	.251
3. Education			-	.246	(-).638	.411
4. Occ. Background					n.s.	.271
5. Marital Status						(-).258
6. Union Interest						-

*The statistic used in this table is Contingency Coefficient, $\bar{C}$, after correction. Except where otherwise indicated by "n.s." (not significant), the values of $\bar{C}$ as listed in the table are statistically significant at .05 level or better. The sign (-) means that the relationship in question is inverse.

The relatively weak relationship between occupational status and union interest ($P < .10$), as shown in Table 45, appears to be caused by one or more of the other four correlates of union interest listed in Table 47. And among those four variables, education appears to be the only variable that is significantly related to all others. Hence, it appears that it is through education that union interest is related to all other factors, including occupational status.

To verify the above conclusion, we cross-tabulated occupational status against union interest holding each of the other four variables constant. The results of this trivariate analysis are

presented in Tables 48 through 51. We see in Table 48 that when religion is held constant there is no relationship between occupational status and union interest among the Hindus. Similarly, no relationship exists between the two variables (occupational status and union interest) among the unmarried workers. However, among the non-Hindus or the married workers occupational status is inversely related to union interest. In other words, in each of these two cases, higher union interest is to be found only among the low status workers, and vice versa. When controlled for either education or occupational background, we fail to find any relationship between occupational status and union interest. This latter finding seems to support the view that it is level of education, rather than occupational status, that accounts for union interest. Thus, the higher the level of education, the greater is a worker's interest in unions in general. Now, a higher proportion of the younger workers have high education and, although age is not directly associated with union interest, the higher union interest among the more educated probably reflects the radicalism of the youthful workers, who are mostly machine operators.

Since education is positively related to union interest, the inverse relationship between marital status and union interest is, clearly, a function of education, for it is the unmarried worker who has more education, is younger and, therefore, is more interested in unions. To the extent that unionism provides the worker an avenue for the expression of radicalism, and in so far as the young are relatively more aggresive in expressing their grievances, the higher level of education among the younger workers seems to be a convenient

Table 48. Occupational status and union interest by religion of worker

Index of Union Interest	NON HINDUS				HINDUS			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	23%	48%	45%	38%	30%	20%	30%	27%
Medium	22	35	14	24	45	52	31	42
High	55	17	41	38	25	28	39	31
Total	100	100	100	100	100	100	100	100
Number of Cases	(31)	(29)	(22)	(82)	(57)	(56)	(67)	(180)
	$\chi^2 = 11.057$ $P < .05$ d.f. = 4 C = .467				$\chi^2 = 6.928$ $P < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Union Interest — $\chi^2 = 7.865$ $P < .10$ d.f. = 4 $\bar{C} = .231$

2) Occupational Status and Religion — $\chi^2 = 2.738$ $P < .30$ d.f. = 2

3) Religion and Union Interest — $\chi^2 = 7.967$ $P < .02$ d.f. = 2 $\bar{C} = .251$

Table 49. Association between occupational status and union interest, according to education of worker

Index of Union Interest	LOW EDUCATION				HIGH EDUCATION			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	31%	42%	44%	38%	17%	19%	20%	19%
Medium	28	34	14	25	62	55	44	53
High	41	24	42	37	21	26	36	28
Total	100	100	100	100	100	100	100	100
Number of Cases	(64)	(38)	(50)	(152)	(24)	(47)	(39)	(110)
	$X^2 = 7.758$ P <.20 d.f. = 4				$X^2 = 2.628$ P< .90 d.f. = 4			

Relationship between:

1) Occupational Status and Union Interest — $X^2 = 7.865$ P <.10 d.f. = 4 $\dot{\bar{C}} = .231$

2) Occupational Status and Education — $X^2 = 14.124$ P <.001 d.f. = 2 $\bar{C} = .330$

3) Education and Union Interest — $X^2 = 9.646$ P <.05 d.f. = 4 $\bar{C} = .271$

Table 50. Occupational status and union interest by occupational background of worker

Index of Union Interest	NON-INDUSTRIAL BACKGROUND				INDUSTRIAL BACKGROUND			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	28%	29%	38%	31%	14%	27%	33%	28%
Medium	41	45	26	38	22	49	28	35
High	31	26	36	31	64	24	39	37
Total	100	100	100	100	100	100	100	100
Number of Cases	(65)	(42)	(42)	(149)	(14)	(33)	(36)	(83)
	$X^2 = 3.929$ $P < .50$ d.f. = 4				$X^2 = 8.577$ $P < .10$ d.f. = 4 $\bar{C} = .415$			

Relationship between:	1) Occupational Status and Union Interest	$X^2 = 7.865$ $P < .10$ d.f. = 4	$\bar{C} = .231$
	2) Occupational Status and Occupational Background	$X^2 = 17.071$ $P < .001$ d.f. = 2	$\bar{C} = .382$
	3) Occupational Background and Union Interest	$X^2 = 22.526$ $P < .001$ d.f. = 2	$\bar{C} = .411$

Table 51. Association between occupational status and union interest, according to marital status of worker

Index of Union Interest	UNMARRIED				MARRIED			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	31%	11%	6%	14%	27%	35%	40%	34%
Medium	54	47	53	51	34	45	21	33
High	15	42	41	35	39	20	39	33
Total	100	100	100	100	100	100	100	100
Number of Cases	(13)	(19)	(17)	(49)	(75)	(66)	(72)	(213)
	$X^2 = 5.487$ P < .30 d.f. = 4				$X^2 = 13.414$ P < .01 d.f. = 4 $\bar{C} = .329$			

Relationship between:

1) Occupational Status and Union Interest — $X^2 = 7.865$ P < .10 d.f. = 4 $\bar{C} = .231$

2) Occupational Status and Marital Status — $X^2 = 1.648$ P < .50 d.f. = 2

3) Marital Status and Union Interest — $X^2 = 8.474$ P < .02 d.f. = 2 $\bar{C} = .258$

vehicle for the expression of their radicalism. That Hindus (compared to the non-Hindus) are more interested in unions is, again, a function of the Hindus being relatively younger and having a higher level of education. Finally, the fact that union interest is higher among those with industrial background and lower among those who come from non-industrial occupational background is, once again, due to the higher level of education among the former group.

Leaving aside, for the time being, the question of causal relationship between union interest and its correlates, we find that a worker's occupational status is related to his interest in unions only under the following conditions:

(a) among the older workers
(b) among workers with high seniority
(c) among workers who have more children
(d) among non-Hindus
(e) among the married workers

And the direction of relationship in each case is inverse, that is, as occupational status rises, the worker's interest in unions declines. It may be recalled from our discussion in Chapter III that each of the five characteristics mentioned above reflects lower level of education, but high wages. Such workers have much to lose, compared to the younger workers, and are therefore less interested in unions , especially when the company has rewarded their seniority with both high wages and high occupational status.

It should be clear from the foregoing that a worker's interest in unions in general is uninfluenced by his occupational status in the factory. The weak relationship ($P < .10$) that we did find initially was probably a function of some other variable(s) that affected them both. This argument is based on the fact that, when controlled

for each of the four other correlates of union interest, the relationship between occupational status and union interest either disappeared completely or remained applicable only to certain categories of workers.

As the natural next step in our analysis, we introduced occupational status as the "control" variable in an effort to determine which of the other four factors was really contributing most toward worker's interest in unions. Now if our above reasoning were correct, we would expect that the introduction of "occupational status" as the control variable does not alter the relationship between union interest and the factor that is its potential source. And, at the same time, if any of the four factors fails to be related to union interest for the different occupational status categories, such a variable would have to be discarded as a source of union interest.

When occupational status is held constant, the relationship between occupational background and union interest disappears completely. That is, the relationship does not hold for any of the three occupational status groups. We may conclude from this that the original relationship between occupational background and union interest was spurious and that it was in fact a function of some third variable(s).

The relationship between religion and union interest (when occupational status is held constant) is found only among the "low" status and the "middle" status workers, but does not hold for the "high" status craftsmen. However, even among the workers in the lower-status groups the direction of relationship is not the same. That is, among the low-status manual workers the higher union interest

is found among the non-Hindus, whereas among the middle-status machine operators the Hindu workers are more highly interested in unions. This difference is not a function of uneven distribution of Hindus and non-Hindus in the two status groups, for the Hindu-non-Hindu ratio is the same for the two groups.

Since the Hindu machine operators (in contrast to the Hindu assemblers and other routine manual workers) are relatively younger, more educated, and have less seniority, it should come as no surprise to us to find that they are more highly involved in unions. Of these three factors, however, education appears to be the more influential factor.

The relationship between education and union interest (when controlled for occupational status) holds for each of the three occupational status categories. Thus, among both the machine operators and the craftsmen, the higher the level of education the greater the union interest, but among the "low" status workers this relationship is reversed. In other words, among the assemblers and the routine manual workers, interest in unions declines as the educational level increases. This inconsistency in our findings can be explained by looking at the educational level of the low status workers in relation to the two upper groups. Almost three-fourths of the low status workers have what we call "low" education, whereas only about one-half of either the machine operators or the craftsmen are in the "low" education category. The negative relationship between education and union interest among the "low" status workers appears to be the result of the preponderance of less educated persons in that group.

Finally, the negative relationship between marital status and union interest does not disappear even when controlled for occupational status. This relationship holds for both the craftsmen and the machine operators, but not for the assemblers. However, the absence of the relationship among the "low" status workers is probably the result of the fact that a higher proportion (85 percent) amongst them are married. It may also be remembered that, as already indicated, a higher proportion of the assemblers are in the low education category.

To sum up the above, union interest appears to be a function of level of education and, to a lesser extent, marital status. Generally speaking, the higher the level of education, the higher the union interest. And the union interest is higher among the unmarried compared to the married workers. Although occupational status does not directly influence union involvement, the peculiar circumstances created by the historical development of the Premier work force account for certain occupational status groups to be more or less interested in unions than others. Thus, there is an interdependence between occupational status on the one hand and level of education or marital status on the other in contributing to union interest among Premier workers.

The relationship between union interest and each of religion, education, and marital status was once again subjected to further examination through multivariate analysis. This time an attempt was made to determine the relative "independence" of each of the three correlates of union interest from the other two. It is hoped that the relationships already discussed in this section will be

further specified as a result of this final phase of our analysis of the data.

It has been argued above that compared to either religion or marital status, level of education seems to have a more powerful impact on workers' interest in unions in general. This found overwhelming support from the analysis indicated above. When controlled for level of education, that is, when the total sample is divided into low and high education groups, the relationship between both (1) religion and union interest and (2) marital status and union interest disappears completely. This evidence alone should suggest that of these three variables it is level of education that in fact influences worker's interest in unions. The relationship between religion and union interest or between marital status and union interest clearly seems to be a function of education, which is common to all of those factors.

Further support to the above finding came when level of education was cross-tabulated against union interest holding each of the other two variables constant. It was discovered that, when controlled for religion, the relationship between education and union interest holds for both non-Hindus and Hindus. In other words, the relationship between education and union interest is "independent" of the influence of religion. But the influence of education upon worker's interest in unions is not completely independent of his marital status. Among the unmarried workers, for example, the level of education shows no relationship with union interest. However, we have serious reservations in accepting this finding for at least two reasons: first, an overwhelming majority of the workers are married

and, therefore, only a small number of cases (49) is found in the "unmarried" category; two, when the unmarried workers are further sub-divided in terms of low and high education, only six cases are found in the low education category because most of the unmarried workers (being young) are in the high education group. The lack of a relationship between education and union interest among the unmarried workers, therefore, could in fact be a function of either insufficient cases in this group or disproportionately higher number of workers in the high education category.

Among the married workers, education was found to be negatively related to union interest, that is, among the married workers union interest is higher than among the less educated and, conversely, lower among the high education group. This latter finding seems to contradict the earlier conclusion that education is positively related to union interest for the sample as a whole. But a look at Table 52 below will reveal that even among the married workers the relationship between education and union interest is not consistent.

Table 52. Education and union interest (for married workers only)

Index of Union Interest	Level of Education		
	Low	High	Total
Low	38%	24%	34%
Medium	24	54	33
High	38	22	33
Total	100	100	100
Number of Cases	(146)	(67)	(213)

$X^2 = 18.312$ d.f. = 2 $P < .001$ $\bar{C} = .410$

It has already been shown that although education is positively related to union interest for the sample as a whole, among the low-status workers (e.g., assemblers and other routine manual workers) there is an inverse relationship between education and union interest. We also know that the low-status workers come from non-industrial background, are mostly rural born, have less education than either the operators or the craftsmen, are older, and a slightly higher proportion amongst them are married. A somewhat similar situation exists among the "married" workers, who are typically older, have more seniority, are non-Hindus, have less education, but earn relatively high wages. As in the case of low status workers, among the married workers, too, education is inversely related to union interest. Except for specifying the two situations in which education's relationship to union interest is reversed, it has not been possible to identify the actual mechanism at work here. Clearly, the four factors under discussion - education, occupational status, religion and marital status - affect union interest in varying combinations and in different degrees. Of these factors, education appears to have a much greater impact on worker's interest in unions, compared to the other three factors. But even education is not completely "independent" of the influence of other factors. We have attempted to specify the conditions under which the positive relationship between education and union interest is modified and elaborated. Although occupational status is not found to directly affect union interest among the workers, it does seem to modify the relationship between union interest and some of its correlates.

In addition to union interest (which is perhaps more an attitudinal than a behavioral item) we used union participation as another index of union involvement. The following three questions were used to measure union participation:

1. Do you attend your factory union meetings?
2. Have you ever been a union representative?
3. Can you recall names of current factory union representatives?

An index of union participation was constructed by combining responses to the above three questions. The distribution of workers in terms of low, medium and high union participation is below:

Index of Union Participation	Number of Cases
Low (scores 0, 1, 2)	100
Medium (score 3)	65
High (scores 4, 5)	62
Total	227

The relationship between occupational status and union participation is shown in Table 53. There is a positive relationship between these two variables. In this case, therefore, we accept the hypothesis that the higher the occupational status of a worker, the greater will be his involvement in the activities of his union.

In addition to occupational status, union participation was also found to be associated with a few other variables from amongst the ones discussed in Chapter III. Union participation is higher among the workers who: (1) earn higher wages, (2) have more seniority in Premier, and (3) are married. The relationships between each of these three variables and union participation are shown in Table 54.

Table 53. Occupational status and union participation

Index of Union Participation	Occupational Status			
	Low	Medium	High	Total
Low	45%	49%	39%	44%
Medium	35	31	20	29
High	20	20	41	27
Total	100	100	100	100
Number of Cases	(78)	(70)	(79)	(227)

$X^2 = 11.581$ d.f. = 4 $P < .05$ $\bar{C} = .299$

Table 54. Association between union participation and its correlates

Relationship Between Union Participation and ...	X^2	d.f.	P	$\bar{C}$
1. Wages (positive)	12.518	2	$< .01$	.334
2. Seniority (positive)	16.926	2	$< .001$	.384
3. Marital Status (positive)	6.229	2	$< .05$	.238

As already shown, both wages and seniority are highly interrelated. And of course each of them is also related to marital status. Thus, the workers who have been with Premier longer earn higher wages and a higher proportion of such workers are married. Since both wages and seniority are also related to occupational status it is proposed to use each of the three variables listed above as "control" variables to further examine the relationship between occupational

status and union participation. But first let us look at the interrelationships among the correlates of union participation which are presented in Table 55. Of the four independent variables, wages and seniority are the only ones that are related to all others. These two are perhaps the major source of worker's participation in union activities.

Table 55. Interrelationships among the correlates of union participation*

	Occ. Status 1	Wages 2	Seniority 3	Mari. Status 4	Uni. Part. 5
1. Occ. Status	-	.360	.256	n.s.	.299
2. Wages		-	.833	.394	.334
3. Seniority			-	.415	.384
4. Marital Status				-	.238
5. Union Participation					-

*The statistic used in this table is Contingency Coefficient, $\bar{C}$, after correction. Except where otherwise indicated by "n.s." the values of $\bar{C}$ as shown above are statistically significant at .05 level or better. All relationships as shown in the table are "positive".

When controlled for either wages or seniority, the original relationship between occupational status and union participation disappears. Data in support of this new evidence may be found in Tables 56 and 57, which clearly indicate that the association between occupational status and union participation was perhaps spurious. However, when marital status is held constant (as shown in Table 58), the original relationship between occupational status and union

Table 56. Occupational status and union participation with wages held constant

Index of Union Participation	LOW WAGES				HIGH WAGES			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	56%	52%	55%	55%	25%	42%	30%	32%
Medium	28	3-	14	25	46	35	24	33
High	16	18	31	20	29	23	46	35
Total	100	100	100	100	100	100	100	100
Number of Cases	(50)	(44)	(29)	(123)	(28)	(26)	(50)	(104)
	$X^2 = 4.242$ $P < .50$ d.f. = 4				$X^2 = 7.220$ $P < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Union Participation — $X^2 = 11.581$ $P < .05$ d.f. = 4 $\bar{C} = .299$

2) Occupational Status and Wages — $X^2 = 17.011$ $P < .001$ d.f. = 2 $\bar{C} = .360$

3) Wages and Union Participation — $X^2 = 12.518$ $P < .01$ d.f. = 2 $\bar{C} = .334$

Table 57. Occupational status and union participation, according to seniority of worker

Index of Union Participation	LOW SENIORITY				HIGH SENIORITY			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	55%	57%	50%	54%	28%	29%	26%	27%
Medium	29	27	20	26	45	43	20	34
High	16	16	30	20	27	28	54	39
Total	100	100	100	100	100	100	100	100
Number of Cases	(49)	(49)	(44)	(142)	(29)	(21)	(35)	(85)
	$X^2 = 3.470$ $P < .50$ d.f. = 4				$X^2 = 7.201$ $P < .20$ d.f. = 4			

Relationship between:

1) Occupational Status and Union Participation — $X^2 = 11.581$ $P < .05$ d.f. = 4 $\bar{C} = .299$
2) Occupational Status and Seniority — $X^2 = 9.679$ $P < .05$ d.f. = 4 $\bar{C} = .256$
3) Seniority and Union Participation — $X^2 = 16.926$ $P < .001$ d.f. = 2 $\bar{C} = .384$

Table 58. Association between occupational status and union participation with marital status held constant

Index of Union Participation	UNMARRIED				MARRIED			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	78%	56%	57%	62%	40%	46%	35%	40%
Medium	11	38	14	23	38	30	22	30
High	11	6	29	15	22	24	43	30
Total	100	100	100	100	100	100	100	100
Number of Cases	(9)	(16)	(14)	(39)	(69)	(54)	(65)	(188)
	$X^2 = 5.529$ $P < .30$ d.f. = 4				$X^2 = 9.744$ $P < .05$ d.f. = 4 $\bar{C} = .301$			

Relationship between:

1) Occupational Status and Union Participation — $X^2 = 11.581$ $P < .05$ d.f. = 4 $\bar{C} = .299$

2) Occupational Status and Marital Status — $X^2 = 1.648$ $P < .50$ d.f. = 2

3) Marital Status and Union Participation — $X^2 = 6.229$ $P < .05$ d.f. = 2 $\bar{C} = .238$

participation holds only for the married. This latter finding, too, seems spurious because the relationship between occupational status and union participation once again appears to be a function of either wages or seniority, or both. The reason for marital status not "washing out" the original relationship completely seems to lie in the fact that more than four-fifths of the workers studied are married and, therefore, the variable "marital status" is perhaps not discriminating enough in this case.

In order to examine further the importance of occupational status vis-a-vis other factors in affecting union participation of a worker, it was decided to cross-tabulate union participation against each of wages, seniority, and marital status, holding occupational status constant. If the original relationship between union participation and each of the other three independent variables was in fact "caused" by occupational status, we would expect that when the latter variable is held constant the original relationship disappears. On the other hand, if any or all of the three factors (wages, seniority, and marital status) were more important than occupational status, or if these were "independent" of the effect of occupational status in this case, then the relationship between them and union participation would still show up even when occupational status is held constant.

When occupational status is held constant, the relationship between marital status and union participation disappears completely. The relationship between seniority and union participation is maintained for each of the three occupational status levels and is, therefore, "independent" of the influence of occupational status. The introduction of occupational status as the control variable revealed

that the relationship between wages and union participation is not completely independent of occupational status. Whereas wages are positively related to union participation for both the assemblers and the craftsmen, this relationship disappears among the machine operators, that is, for the medium status workers. The reasons for this inconsistency lie in the fact that the middle group suffers from status inconsistency more than either extreme group of workers. Although higher in status than the assemblers and other routine manual workers, the machine operators (because of being young and having less seniority) are at the same wage level as the low status workers. It is probably due to this inconsistency that wages fail to influence union participation among the machine operators.

So far we have examined the relationship between occupational status and union participation when each of wages, seniority, and marital status is held constant. By and large, there is no direct relationship between occupational status and union participation. Any relationship between these two variables that was found for the sample as a whole was probably a function of one or more of the other factors mentioned above. We have also investigated the relationship between union participation and each of wages, seniority, and marital status when occupational status is held constant. Except for marital status, the other variables do seem to influence union participation more or less independently of occupational status. We may conclude from this that whereas the relationship between occupational status and union participation is a function of some other factors (e.g., wages, seniority, etc.), the influence of both wages and seniority upon union participation is generally "independent" of occupational status.

The relative importance of wages, seniority, and marital status (vis-a-vis one another) in influencing union participation will be examined next. When either wages or seniority is held constant, the relationship between marital status and union participation disappears completely, which shows that the original relationship between marital status and union participation was in fact caused by either wages or seniority, or both. When controlled for seniority, on the other hand, wages fail to influence union participation, which suggests that wages and seniority are not independent of each other in their relationship to union participation. Similarly, the relationship between seniority and union participation holds only for the high wage category, that is, when controlled for wages. Marital status, too, seems to modify the influence of both wages and seniority upon union participation. Thus, we find that wages are related to union participation for the married workers only, and that seniority is related to union participation among the married workers only.

It appears from the above discussion that a worker's involvement in the activities of his union is positively associated with his wages and length of employment in Premier. Although a similar relationship exists between union participation and occupational status, the latter seems to reflect only the length of employment or wage level of the worker rather than the technological work environment implicit in our use of the term occupational status. We must, therefore, reject the hypothesis that occupational status is positively related to union participation.

To be <u>interested</u> in unions in general and to <u>participate</u> in the activities of the present union are two different things. Ideally,

if a worker is interested in unions in general we would expect him also to be active in union participation. But this was not found to be the case in Premier.[3]

More than any other single factor, wages appear to determine to a large extent the degree of participation in union activities on the part of the Premier worker. This can be understood better if we examine the role of union in determining the wages of Premier workers. While it is true that the initial wages of a new recruitee are decided only by the management, an increase in wages after recruitment is usually subject to the mediation of the factory union, except in the case of a small annual increment which a worker earns automatically. For years the firm and the unions have been negotiating over the matter of re-classification of all factory workers. The re-classification involves, besides change of skill designation, an increase in the present wages. This was one of the "hot" issues between the union and the management, and the workers were almost unanimous in naming it the "number one" problem with which the union should be concerned. As the matters stand at present, the selection of persons to be re-classified and the extent of wage increase in each case are handled in a rather arbitrary manner. The union prepares a list of the workers that are considered to be eligible for re-classification. The union and the management then bargained over

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3. The relationship between union interest and union participation is $X^2 = 0.715$; d.f. = 2; $P < .90$. In a similar study conducted in Italy, it was discovered that the dissatisfied workers were "most interested" in union affairs, although they were not highly involved in union activities. See Paolo Ammassari, "Worker Satisfaction and Occupational Life: A Study of the Automobile Worker in Italy," Unpublished Ph.D. Dissertation, Department of Sociology, Michigan State University, 1964, Chapter VIII.

who should get how much, and from what date, after which an agreement is reached between the two parties and, finally, the workers affected by such an agreement are notified to that effect.

Since the union exercises tremendous control over the matter of wage increase through re-classification, the workers are to some extent at the mercy of the union. To be recommended for wage increase, therefore, a worker has to be on the good books of the union. And this is probably why we find union participation to be related to wages and to length of service in Premier.

We also found that union participation is positively related to: (1) attendance at work and (2) occupational aspirations.[4] Thus, the workers who are active in union participation are also the ones who have a good attendance record in the factory, and who have relatively high economic aspirations (when measured in terms of amount of money they expect to make in the future). Here again it appears that an emphasis on higher wages is responsible for union participation which, in turn, influences attendance at work. It may be recalled that there is no direct association between wages and attendance at work.

3. Neighborhood Involvement

It is expected that occupational status is positively related to neighborhood involvement. This hypothesis is based on the assumption that the higher the occupational status, the greater the worker's satisfaction and involvement with his occupational as well as non-

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4. The relationship between union participation and ...

(1) Attendance at Work: $X^2 = 7.086$; d.f. = 2; $P < .05$; $\bar{C} = .254$

(2) Occup. Aspirations: $X^2 = 6.405$; d.f. = 1; $P < .02$; $\bar{C} = .260$

occupational activities, including neighborhood involvement. The following items were used to measure neighborhood involvement among the Premier workers:

1. If you could choose would you continue to live in this neighborhood or would you prefer to more?
   - would prefer to move
   - would continue living here

2. About how many friends or acquaintances live in your neighborhood, excluding your relatives?
   - none, don't know, other
   - one - ten
   - eleven or more

3. Would you be inclined or not inclined to attend some meeting to discuss problems of your neighborhood?
   - no, other
   - yes

4. Do you have relatives who live in the neighborhood but not with you?
   - none, don't know
   - one - ten
   - eleven or more

5. Do you exchange visits with them (friends or acquaintances in the neighborhood)?
   - no, no friends, other
   - yes, less than once a week
   - yes, at least once a week

6. In any case, in your opinion, what are some of the major problems of your neighborhood?
   - don't know
   - there are none
   - mentioned problems

The index of neighborhood involvement based on the above six items yielded several score types, which were then combined into "low" and "high" groups as below:

Index of Neighborhood Involvement	Number of Cases
Low (scores 0 - 6)	117
High (scores 7 - 10)	128
Total	245

As shown in Table 59 below, no direct relationship is found between occupational status and neighborhood involvement. The proportion of workers who are more (or less) involved in the affairs of their neighborhoods is exactly the same for both the machine operators and the craftsmen. And there are no marked differences between machine operators and craftsmen, on the one hand, and assemblers, on the other, in terms of low or high neighborhood involvement.

Table 59. Association between occupational status and neighborhood involvement

Index of Neighborhood Involvement	Occupational Status			
	Low	Medium	High	Total
Low	53%	45%	45%	48%
High	47	55	55	52
Total	100	100	100	100
Number of Cases	(81)	(80)	(84)	(245)

$X^2 = 1.379$ d.f. = 2 $P < .90$

Of the twelve independent variables discussed in Chapter III, only occupational background was found to be related to neighborhood involvement.[5] Thus, the workers with occupational background in industrial - manufacturing occupations show a higher neighborhood involvement than those who do not possess such occupational background.

When controlled for occupational background (Table 60) we did not discover any relationship between occupational status and neighborhood

5. Occupational background is positively related to neighborhood involvement: $X^2 = 4.164$; d.f. = 1; $P < .05$; $\bar{C} = .216$

Table 60. Occupational status and neighborhood involvement by occupational background of worker

Index of Neighborhood Involvement	NON-INDUSTRIAL BACKGROUND				INDUSTRIAL BACKGROUND			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	58%	43%	55%	53%	23%	47%	37%	39%
High	42	57	45	47	77	53	63	61
Total	100	100	100	100	100	100	100	100
Number of Cases	(60)	(40)	(38)	(138)	(13)	(30)	(35)	(78)
	$X^2 = 2.532$ $P < .30$ d.f. = 2				$X^2 = 2.179$ $P < .50$ d.f. = 2			

Relationship between:

1) Occupational Status and Neighborhood Involvement — $X^2 = 1.379$ $P < .90$ d.f. = 2

2) Occupational Status and Occupational Background — $X^2 = 17.071$ $P < .001$ d.f. = 2 $\bar{C} = .382$

3) Occupational Background and Neighborhood Involvement — $X^2 = 4.164$ $P < .05$ d.f. = 1 $\bar{C} = .216$

involvement. In fact, we introduced each of the several independent variables listed in Chapter III as "control" variables to find out if occupational status has some impact on neighborhood involvement under certain conditions. The results of this type of analysis show that under none of the conditions investigated is occupational status related to neighborhood involvement. To the extent that the index of neighborhood involvement as here used represents a person's integration into the social life of his neighborhood, we may conclude that except for the occupational background of a person none of the other variables can help us predict his involvement.

In a study of 648 Detroit males from 21 to 55 years of age, Wilensky has shown that men with more "orderly work histories" have on the average stronger attachments (1) to community organizations and (2) to relatives, friends, and neighbors.[6] The orderly work history is defined by Wilensky in terms of the extent to which a worker's work history constitutes a "career" rather than a succession of unrelated jobs. According to Wilensky, "Participation in community life is a natural extension of participation in the labor market: orderly and pleasant experiences in the latter provide motive and opportunity for the former... chaotic experiences in the economic order foster a retreat from both work and the larger communal life."[7]

The positive relationship between occupational background and neighborhood involvement as found in this study supports to some extent the thesis proposed by Wilensky. As Table 61 shows, workers who

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6. Harold L. Wilensky, "Orderly Careers and Social Participation: The Impact of Work History on Social Integration in the Middle Class," American Sociological Review, 26 (August, 1961) pp. 521-539.

7. Ibid.

are more highly involved in the affairs of their neighborhoods come mostly from background experience in industrial-manufacturing occupations. We can describe this group, in Wilensky's terms, as having an "orderly work history" in that factory work constitutes a "career" for them.

Table 61. Association between occupational background and neighborhood involvement

Index of Neighborhood Involvement	Occupational Background: Agricultural or Business & Services	Occupational Background: Industrial-Manufacturing	Total
Low ...	53%	38%	48%
High ...	47	62	52
Total ...	100	100	100
Number of Cases ...	(138)	(78)	(216)

$X^2 = 4.164$ d.f. = 1 $P < .05$ $\bar{C} = .216$

In order to further test the connection between occupational background and neighborhood involvement, we introduced occupational status as a "control" variable. When occupational status is held constant, the relationship between occupational background and neighborhood involvement disappears in all but one case, the craftsmen. We may conclude from this evidence that although we can predict the level of neighborhood involvement on the basis of a knowledge of the occupational background of Premier workers, there is no direct and clear-cut relationship between the two.

Although no direct relationship was found between level of education and neighborhood involvement, it was discovered that, when controlled

for occupational status, level of education is positively related to neighborhood involvement among the machine operators. This group of workers, of course, has the highest level of education compared to either craftsmen or the assemblers.

We failed to find support for Wilensky's other argument which suggests that "pleasant work experiences" lead to participation in community life. To the extent that work satisfaction reflects pleasant work experiences, we can say that among the workers studied there is no relationship between neighborhood involvement on the one hand and any of the indexes of worker satisfaction on the other. Thus, no links were found to exist between the occupational and non-occupational lives of the workers studied.

4. Community Involvement

Following the same logic as that mentioned for neighborhood involvement, we expect that occupational status is positively related to worker's involvement in the affairs of his community of residence. An index of community involvement was constructed on the basis of the following four items:

1. Do you like living in this community?
   - no, other
   - yes

2. (If the respondent reads newspapers): Are you more interested in local news or national news?
   - national
   - local

3. Do you participate in activities of any organizations? (exclude unions)
   - none
   - yes, one organization
   - yes, more than one organization

4. In your opinion, what are the most important problems facing your community of residence (town, city)?
   - don't know
   - there are none
   - problems mentioned

The distribution of workers in terms of their scores for the index of community involvement is below:

Index of Community Involvement	Number of Cases
Low (scores 0 - 3)	56
Medium (score 4)	79
High (scores 5 - 7)	91
Total	226

The relationship between occupational status and community involvement is shown in Table 62 below. In this case there is no relationship between these two variables and, therefore, we reject the hypothesis that occupational status is positively related to community involvement.

Table 62. Occupational status and community involvement

Index of Community Involvement	Occupational Status			
	Low	Medium	High	Total
Low ...	33%	23%	20%	25%
Medium ...	34	32	38	35
High ...	33	45	42	40
Total ...	100	100	100	100
Number of Cases ...	(67)	(74)	(85)	(226)

$X^2 = 4.309$ d.f. = 4 $P < .50$

Among the twelve variables discussed in Chapter III, education is the only factor that seems to affect community involvement.[8] Generally speaking, the higher the level of education, the greater the community involvement. Since level of education is also positively associated with occupational status within the factory, we used "education" as the control variable in further examining the relationship between occupational status and community involvement. As Table 63 shows, community involvement does not appear to be a function of occupational status at all.

Although it is quite clear from the above that occupational status of a worker does not affect his involvement in the affairs of his community of residence, either directly or when controlled for a third factor "education," it still remains to be seen whether level of education affects community involvement <u>independently</u> of occupational status. To examine the latter possibility we cross-tabulated education against community involvement, holding occupational status constant.

If the relationship between education and community involvement was independent of the influence of occupational status, we would expect that for each of the three occupational status levels education is related to community involvement. This, however, is not the case for, when controlled for occupational status, the relationship between education and community involvement holds only for the middle status workers and disappears for both the low status and the high status workers. In other words, it is only among

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8. Education is positively related to community involvement:
$X^2 = 12.595$ d.f. = 2 $P < .01$ $\bar{C} = .335$

Table 63. Association between occupational status and community involvement by educational level of worker

Index of Community Involvement	LOW EDUCATION				HIGH EDUCATION			
	OCCUPATIONAL STATUS				OCCUPATIONAL STATUS			
	Low	Medium	High	Total	Low	Medium	High	Total
Low	37%	40%	28%	34%	26%	11%	10%	14%
Medium	36	23	35	33	30	39	41	38
High	27	37	37	33	44	50	49	48
Total	100	100	100	100	100	100	100	100
Number of Cases	(44)	(30)	(46)	(120)	(23)	(44)	(39)	(106)
	$X^2 = 2.648$ $P < .90$ d.f. = 4				$X^2 = 3.560$ $P < .50$ d.f. = 4			

Relationship between:

1) Occupational Status and Community Involvement $X^2 = 4.309$ $P < .50$ d.f. = 4

2) Occupational Status and Education $X^2 = 14.124$ $P < .001$ d.f. = 2 $\bar{C} = .330$

3) Education and Community Involvement $X^2 = 12.595$ $P < .01$ d.f. = 2 $\bar{C} = .335$

the machine operators that education is positively related to community involvement and, as far as the other two groups of workers are concerned, those two variables are not related to each other.

We may conclude from the above that although occupational status is not directly related to community involvement, it does seem to have an indirect effect upon the relationship between level of education and community involvement. As previously noted, the machine operators in Premier have more education than either the assemblers or the craftsmen. But the higher level of education among the machine operators is a function of age (they are younger than either the low status or the high status workers) rather than that of the demands of their work tasks. The manufacturing departments in Premier have been the last to be established and their work force has been more recently hired, compared to the other departments in the factory.

Education was found to be the only variable related to community involvement, but when controlled for occupational status even education does not prove to be a good predictor of community involvement among all workers. As in the case of neighborhood involvement, it is only among the machine operators that education seems to affect a worker's involvement in the affairs of his community of residence. Since there is no relationship among either the assemblers or the craftsmen, it is possible that the relationship found between education and community involvement (among the machine operators, that is) is in fact a function of some yet unknown factor(s).

Community involvement (like neighborhood involvement already discussed in the preceding section) is an area of experience that lies outside the realm of work. We had expected that a person's

status at work would affect his life activities outside the plant as well. However, no such straight relationship exists between the work and non-work activities.

The fact that not a single occupational (that is, work related) variable is associated with community involvement as used in this study suggests that perhaps there is little overlap between the two sectors of life activities. This absence of a relationship between the two areas is produced, among other things, by the fact that Premier workers do not live in any one or more workers' colony or colonies, where the patterns of interaction developed in the factory could be maintained during leisure hours. The residential pattern of the workers interviewed suggests that they are scattered all over Greater Bombay and that they are living in communities which are in most cases fairly diverse and inter-mixed in terms of the occupational lives of their inhabitants. In such communities, therefore, the patterns of interaction would be affected by factors other than a person's status within a factory. The latter identity would be particularly relevant if these workers were living in one or more housing unit(s) specifically designed to house workers from the factory.

No evidence was found to support the proposition that a satisfied worker (compared to a dissatisfied worker) is more active in the affairs of his community of residence. Here again we find a discontinuity between life inside and outside the factory.[9] That this

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9. Ammassari found a similar split between worker satisfaction, on the one hand, and either neighborhood or community involvement, on the other, among the Italian automobile workers. In general, social activities outside the plant were found to be dependent more on social and personal characteristics of the worker than on his patterns of work satisfaction. See Ammassari, op. cit., pp. 214-215.

reflects a conscious effort on the part of the factory workers to "compartmentalize" their two lives cannot be determined on the basis of the data gathered for this study.

It may be argued that the unpredictability of neighborhood and community involvement is perhaps a function of some peculiar patterns of neighborhood and community organization in India. It may be recalled that our measures of beighborhood and community involvement are based exclusively on a person's involvement with the affairs of the geographical location of his residence. It is possible that in an Indian city, the physical proximity to one's neighbors and townsmen does not influence one's behavior and that such factors as religious affiliation, caste status, regional and linguistic background may be more important in affecting patterns of social interaction among the Indians.[10] However, we lack sufficient data on the leisure-time activities and the residential patterns of the workers we studied and, therefore, it is not possible either to accept or reject the arguments in question.

Conclusion

Four areas of worker behavior were examined in order to determine the role of occupational status in affecting certain aspects of worker behavior. Except in one case, union participation, no significant relationship was discovered between occupational status and worker behavior. And even in that one case it turned out that,

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10. Srinivas has noted that there is a certain amount of residential clustering on the basis of language, which is achieved even in housing projects built by the government. See M. N. Srinivas, Social Change in Modern India, Berkeley: University of California Press, 1966, p. 139.

when controlled for wages or seniority, the relationship between occupational status and union participation disappeared completely.

We had hoped that worker satisfaction should contribute to greater involvement of the worker in his life activities, both at work as well as outside the factory.[11] But no such simple relationship was found between worker satisfaction and worker behavior in any of the several areas studied. The satisfied worker, in other words, is no more or less involved than the dissatisfied worker in so far as his behavior under investigation is concerned.

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11. Clark Kerr et al., Industrialism and Industrial Man, New York: Oxford University Press, 1964, p. 171. These authors maintain that in the industrial community new relationships based upon employment or occupation come to replace the larger family and village attachments. In the place of the latter, they suggest, the governments of the city and nationalist state become the object of loyalty and a source of security.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

Summary of Findings

In the preceding two chapters we examined the role of technology (as manifested in occupational status of each worker) in affecting work experience and certain behavior patterns of the Indian automobile worker. Chapter IV deals with the impact of technology on worker satisfaction with the following aspects of his work experience: (1) the situs, (2) the firm, (3) the occupation, and (4) the job. Except for satisfaction with the firm, occupational status of a worker was found to be related to every other aspect of his work experience. And the direction of relationship in these cases in general supported the theory outlined in the first two chapters. Thus, we found that workers in higher status jobs (in contrast to those in lower status jobs) were generally satisfied with each of the following aspects of their work experience - the situs, the job and the occupation (as measured by the level of occupational aspirations). There was, however, one exception to this general trend; satisfaction with the present occupation (when measured through direct questions) was found to be inversely related to occupational status.

To the extent that the above findings generally support the Industrial Man hypothesis, they are significant in and of themselves. However, our analysis did not end there, but we extended the scope of our investigations through a limited application of multivariate analysis. Early in Chapter III it was observed that occupational status

was related to a number of other background and demographic factors. Therefore, we expected that satisfaction with each of the various areas of work experience would also be associated with some of those variables. After having identified several correlates of worker satisfaction with each of the selected areas of work experience, we proceeded to examine through multivariate analysis the role of occupational status vis-a-vis other variables in affecting worker satisfaction. When the relationship between occupational status and worker satisfaction was examined after controlling for each of the other correlates of worker satisfaction, the following new relationships, or elaborations and specifications of the existing relationships, came to light.

Situs Satisfaction: Despite controlling for wages, occupational background, education, or rural-urban background (each of which was found to be related to situs satisfaction), the relationship between occupational status and situs satisfaction did not completely disappear. But, at the same time, the original relationship was not completely independent of those factors. We found, for example, that occupational status was positively related to situs satisfaction only among the less paid, less educated, rural born, or those without previous experience in industrial-manufacturing occupations.

Occupational Aspirations: As in the case of situs satisfaction, the holding of each of the several correlates of occupational aspirations constant did not make the relationship between occupational status and occupational aspirations disappear. Unlike situs satisfaction, however, it was found that the original relationship was "independent"

of such factors as wages, age, seniority, and level of education. The remaining two correlates of occupational aspirations, religious affiliation and rural-urban background, were found to have some conditioning effect on the relationship between occupational status and aspirations. We found that the original relationship held only for the Hindu workers but not the non-Hindu workers, and for the rural born but not the urban born.

Job Satisfaction: The original (positive) relationship between occupational status and job satisfaction was "specified" in that it existed only among the less paid, the younger workers, or those with less seniority in Premier.

Occupational Satisfaction: For occupational status to be inversely related to occupational satisfaction (when the latter is measured through direct questions) came as a surprise because this finding was out of step with others. However, when controlled for other correlates of occupational satisfaction, the finding in question was no longer enigmatic. When either age or caste status is held constant, the relationship between occupational status and occupational satisfaction disappears completely, which shows that the original relationship was perhaps spurious. Similarly, when controlled for level of education only a weak relationship ($P < .10$) between occupational status and occupational satisfaction remains for the less educated workers while the relationship disappears for the more educated workers. It may be concluded from this that satisfaction with the present occupation (when measured through a direct question or two) is not a function of occupational status.

Satisfaction with the Company: No relationship was found between a worker's occupational status and his satisfaction with the firm. But we did find that satisfaction with the firm was related to certain other factors as, for example, wages, age, caste status, seniority, and number of children. When the relationship between occupational status and satisfaction with the company was examined by holding constant each of the other five correlates of satisfaction with the firm, there still was no relationship between those two variables. Satisfaction with the firm is perhaps not influenced by a worker's occupational status.

Chapter V analyzes the relationships between occupational status and certain areas of worker behavior, both occupational and non-occupational. Of the five areas of behavior examined - attendance at work, union interest, union participation, neighborhood involvement, and community involvement - only union participation was found to be related to occupational status. But when controlled for either wages or seniority, even that relationship (between occupational status and union participation, that is) disappears. On the face of this evidence, therefore, it may be concluded that when it comes to predicting actual behavior of the worker, occupational status within the factory turns out to be a poor predictor. And this holds true for both occupational and non-occupational behavior. The results of the multivariate analysis in the case of each of the five areas of worker behavior are summarized below:

Attendance at work: Of the twelve variables discussed in Chapter III, including occupational status, only rural-urban background was found to be related to attendance at work. We found, for example, that

the proportion of workers with a high attendance rate was higher among the rural born than among the urban born. Although no direct relationship existed between occupational status and attendance at work, when controlled for rural-urban background, we discovered that among the urban-born workers occupational status was positively related to attendance. In other words, among the urban-born workers, the higher the occupational status the better the attendance record.

Union interest: Interest in unions generally is not related to occupational status, but it is related to education, religion, and marital status. After controlling for each of these three variables we found that among the non-Hindus and among the married (incidentally, these two are positively related to each other), as occupational status rises, interest in unions declines. No such relationship was found among the Hindus or the unmarried workers. But when level of education was held constant, the weak original relationship between occupational status and union interest ($P < .10$ disappeared completely, which suggests that education rather than occupational status affects workers' interest in unions.

Union participation: Of the five areas under investigation in Chapter V, only union participation was found to be related to occupational status. In addition to occupational status, however, we found wages, seniority, and marital status to be also positively related to union participation. Controlling for wages of seniority, the relationship between occupational status and union participation disappears completely, which suggests that the original relationship was spurious. When marital status was held constant, the relationship between

occupational status and union participation still held for the unmarried workers, although it disappeared for the married workers. However, even in this case it is not occupational status that affects union participation for, it might be recalled, more than four-fifths of the workers in the sample were married, and probably their large numbers are responsible for the relationship between occupational status and union participation. We may conclude from this that participation in the activities of union is probably a function of wage level, which of course is positively related to length of employment in the factory, but not to occupational status.

Neighborhood involvement: No relationship was found between occupational status and neighborhood involvement. And, even after several "controls" are used, there does not appear to be any relationship between these two variables under any condition. Occupational background of the workers was the only variable that affected neighborhood involvement. Thus, workers with backgrounds in industrial-manufacturing occupations generally show a higher degree of neighborhood involvement than those who do not possess such past experience. The positive relationship between occupational background and neighborhood involvement seems to support Wilensky's thesis that "orderly work histories" lead to attachments to community organizations and to relatives, friends, and neighbors. But it may be mentioned that even occupational background does not affect neighborhood involvement consistently among all workers, for it was found that the said relationship held only for the craftsmen.

Community involvement: As in the case of neighborhood involvement, occupational status does not appear to affect community involvement either. Of the many independent variables used in this study, including occupational status, community involvement was found to be related only to level of education. Although no direct relationship existed between occupational status and community involvement, we introduced one after another several "controls" to investigate if under certain conditions the two variables are in fact related to each other. Such analyses revealed that under none of the circumstances examined was community involvement a function of occupational status.

To sum up the above, occupational status was generally found to be associated with worker satisfaction in several areas of his work experience. However, as far as worker behavior is concerned (whether it is occupational behavior or otherwise), the occupational status of a worker proved to be a poor predictor, if at all, of his behavior as measured through his involvement with the activities at work, in the union, in the neighborhood, or in the community. This situation (at least in the case of the last two sectors of worker involvement) is certainly not peculiar to India, for Ammassari found similar patterns among the Italian automobile workers.[1] Like him, we suspect that at the present level of industrial development the processes that link work experiences with social activities outside the factory are not yet sufficiently stabilized and patterned.

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1. Paolo Ammassari, "Worker Satisfaction and Occupational Life: A Study of the Automobile Worker in Italy," Unpublished Ph. D. Dissertation, Department of Sociology, Michigan State University, 1964, pp. 214-215.

Limitations of the Study

The findings in Chapter IV clearly indicate that the subjective experience of the Indian automobile worker, as measured through his satisfaction with the various aspects of work, is shaped primarily by his occupational status within the factory. Such traditional factors as religious affiliation, caste status, marital status, and number of children were either not related to worker satisfaction or, if related, the observed relationship was a function of some other variable(s). While these findings support the Industrial Man thesis advanced early in this study, it is important to recall that we deal here with a very special case of industrial workers in India. The workers we studied are associated with an industry that enjoys high prestige in the country, and there are not many more of such industries in India at least at the present time. In terms of wages, too, these workers are among the best paid in the country. In fact, it might be argued that the automobile industry belongs to a fairly advanced stage of industrial development in any society and that, therefore, the work force of this industry is quite different from that found in other, less-advanced industries in a developing society like India. And yet, our findings (insofar as labor force commitment is concerned) generally support those of Lambert, who studied smaller and more traditional factories in a much smaller Indian city.

As far as worker behavior is concerned, we failed to predict it on the basis of a knowledge of his occupational status in the factory. There appear to be several possible reasons for this lack of a relationship between occupational status and worker behavior in a few selected "areas" of his activities, both occupational as well as

outside the factory. Attendance at work (for which we had a very precise and reliable measure) lacked information as to the reasons for staying away from work. Since absence from work may be due to a variety of reasons - sickness, accidents, visiting the village, and the like - working with attendance data alone is not fruitful. Perhaps a more useful approach would be to work with data on absenteeism together with reasons for it. We strongly feel that when controlled for "positive" or "negative" reasons for absence from work, it should be possible to predict work attendance on the basis of a knowledge of worker's occupational status.

We failed to find a direct relationship between occupational status and union involvement among the Premier workers. Union involvement was investigated in two different ways: (1) worker's interest in unions in general and (2) his participation in union activities. As Seidman and associates point out, "The union touches a peculiarly vital part of the worker's life in that it affects his standard of living, his treatment and his satisfactions during working hours."[2] Although membership in a union is not compulsory in Premier, it still pays to be a member. And it is our impression that the motivation of those who do join one of the two unions in existence is primarily pragmatic. That is, the union subscription is seen by most of them as a kind of "investment for better returns" in such matters as increased wages and bonus, etc. Only a handful of workers (mostly young and more educated persons) appear to be ideologically committed to unions. Many workers who gave an

2. Joel Seidman et al., The Worker Views His Union, Chicago: University of Chicago Press, 1958, p. 200.

"unfavorable" evaluation of their union commented that although they had been regularly paying their union dues, they were not "getting back their investment." But the dominance of the "instrumental" over the "ideological" orientation toward unions is perhaps not unique to the Indian worker, for workers everywhere seem to be motivated primarily by pragmatic considerations unless, of course, they work in a "closed shop" system.

The political role of trade unions in the newly developing societies seems to have been over emphasized.[3] While it is true that the top leaders of unions in such countries are often educated elite, "outsiders" who are not part of the industrial framework, the rank and file membership, at least in the factory under study, is concerned mainly with job security and other pragmatic goals, rather than with any plans for political action. In this sense, then, the Indian worker does not differ much from his American counterpart.[4] In both cases, union involvement is a function of pragmatic considerations (wages, job security, etc.) more than any ideological commitment to unions.

But our finding of a lack of relationship between occupational status and union involvement contradicts the findings reported by Deutsch in his study of Oldsmobile workers in Lansing, Michigan. Union involvement among the Oldsmobile workers is reported to be

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3. Bruce H. Millen, The Political Role of Labor in Developing Countries, Washington, D.C.: Brookings Institution, 1963. See also UNESCO, Social and Cultural Factors Affecting Productivity of Industrial Workers in India, Delhi: UNESCO Research Center on Social and Economic Development in Southern Asia, 1961, p. 36.

4. Delbert C. Miller and William H. Form, Industrial Sociology: The Sociology of Work Organizations, New York: Harper, 1964, pp. 298-299.

positively related to occupational status.[5] Since among the Premier workers, too, a significant relationship was found initially between occupational status and union participation (which later disappeared when controlled for either wages or seniority) we suspect that the relationship found by Deutsch might have been spurious. Given the fact that workers view their union in essentially pragmatic terms, it is to be expected that their involvement with the union activities is influenced more by such considerations as wages or job security than occupational status in the factory.

Finally, the fact that no relationship was found between occupational status and either neighborhood involvement or community involvement may be due to the fact that, at the present level of industrial development, the processes that link the occupational and the social worlds are not yet sufficiently stabilized and patterned. Also, our knowledge about workers' involvements in the affairs of their neighborhoods and communities of residence is based exclusively on what the workers themselves told us in the course of interviewing. That is, we have no first-hand data on how the workers live or on their social interaction outside the plant.

But if occupational status failed to predict worker's behavior outside the plant, so did also the traditional criteria of status assignment. Thus, religion, caste, marital status, number of children, and rural-urban background proved equally ineffective in predicting workers' involvement in the affairs of their neighborhood or community

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5. Steven E. Deutsch, "Skill Level, Social Involvement and Ideology: A Study of Automobile Workers," Unpublished Ph.D. Dissertation, Department of Sociology, Michigan State University, 1964, pp. 65-66.

of residence. This (negative) evidence seems to contradict the notion that the Indian automobile worker lives in two mutually exclusive and compartmentalized worlds, one in the factory and the other outside it. However, in the absence of sufficient data on the residential patterns of workers under study, we must leave it as an open question rather than judging the relative importance of the two status systems in relation to neighborhood and community involvement.[6]

Occupational Status and the Traditional Caste Hierarchy

Some writers suggest that in India, as far as the Hindus are concerned, there is a general correlation between traditional caste hierarchy and the new Western-occupational hierarchy. It is pointed out, for example, that the members of the higher castes are found mostly in the professions and other white-collar occupations, while the lower castes provide certain essential services and goods. According to this view, one should expect that the workers attracted toward factory employment are predominantly non-Hindus and members of the lower castes, if Hindus. But, as Srinivas has suggested, the extension of the traditional-modern continuum to industry is based on earlier generalizations which lacked carefully conducted empirical studies.[7]

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6. Srinivas suggests that in large cities such as Bombay, Delhi, Calcutta, and Madras, "voluntary associations tend to be formed on the basis of language, sect, and caste, and these make up in some ways for the loss of a traditional social and cultural environment." See M. N. Srinivas, Social Change in Modern India, Berkeley, University of California Press, 1966, p. 139. It may be pointed out that Srinivas fails to present empirical evidnece in support of his claim.

7. Srinivas, op. cit., p. 64.

Systematic studies of the Indian labor scene have shown that partly due to the surplus labor supply and also as factory employment offered comparatively high wages, the factories have all along attracted workers from all levels of traditional society.[8] The most recent of such studies is the one of Poona workers by Lambert, which shows that the presumption that Brahmins are reluctant to enter factory work is invalid. In fact, the Brahmin and Maratha castes together constitute the majority of the Hindu workers in Lambert's study. And the same is true in the present case where the ratio of the upper two castes to the lower two is two to one. We tend to agree with Lambert's contention that the Backward Castes seem to be neither excluded from nor disproportionately attracted to the factory employment.[9]

While, therefore, it is probably true that a higher proportion of the upper castes is found in professions and other white-collar occupations, it is not necessarily the case that upper castes are reluctant to take up factory employment or that a disproportionately higher percentage of lower castes is attracted to factory work. And although the ascription-based caste hierarchy differs substantially from the achievement-oriented status system of the modern

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8. Morris D. Morris, "Caste and Evolution of the Industrial Workforce in India," Proceedings of the American Philosophical Society, 104, 2 (April, 1960), pp. 124-133; Charles A. Myers, Industrial Relations in India, Bombay: Asia Publishing House, 1960, p. 92.

9. Richard D. Lambert, Workers, Factories, and Social Change in India, Princeton, New Jersey: Princeton University Press, 1963, p. 36. It may be pointed out that while Lambert had access to data on the caste composition of the larger population of Poona City, no such data were available to us for the population of Greater Bombay. In the absence of comparable data, therefore, a systematic comparison of our findings with those of Lambert is impossible.

factory, the Hindu workers we studied appear to have made the transition from one system to the other without apparently experiencing much personal conflict. We lack data to show whether these workers are trying to compartmentalize their occupational and non-occupational lives.[10]

We were concerned in this study with only one occupational group - the industrial workers in one factory. However, as already shown, there are substantial differences in terms of status within this one group of industrial workers. It might be argued that the upper castes are attracted perhaps to the high status jobs only, while the lower castes predominate in the low status factory work. Our data do not support this argument because, as already shown in Chapter III, there is no association between caste status and occupational status in the factory. This is so in spite of the fact that the upper castes have more education and more previous experience in industrial-manufacturing occupations. In fact, caste status was found to be inversely related to wages. That is, the lower castes are earning relatively higher wages in Premier than the upper castes. I must hasten to add that this situation is not the result of caste prejudice on the part of the factory management, but a natural consequence of the fact that upper caste Hindus are among the more recently hired workers. Since length of service largely determines a worker's wages in this factory, the upper castes (who

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10. Attempts to insulate one social identity from the other are not uncommon, as illustrated by the remark of one of Gough's respondents: "When I put on my shirt to go to the office, I take off my caste, and when I come home and take off my shirt, I put on my caste." See Srinivas, op. cit., p. 123.

are relatively younger) are earning lower wages by virtue of their lesser seniority.

We have dealt at length with the question of worker satisfaction with employment in the industrial sector. Through a series of questions the workers were asked to rank or give their preference for work in industry, in an office, or in agriculture. If the upper caste Hindus (even though not reluctant to enter factory employment) takes up factory work mainly due to its higher monetary rewards, we would expect that, compared to the lower castes, the upper castes are less satisfied with this sector of employment. That is, their attachment to the intrinsic features of industrial work should, in that case, be minimal. However, we did not discover any relationship between caste status and situs satisfaction. This may be seen as yet another reason to believe that, among the workers studied, traditional caste status is not relevant either at the time of their initial entry or their subsequent commitment to employment in the industrial sector.

Even the limited evidence presented in this study suggests that, at least among the automobile workers we studied, the more recently acquired occupational status is more important than any of the traditional criteria, including caste, in influencing workers' response to factory employment in general and to their specific jobs in particular. And, on the other hand, if occupational status failed to account for worker behavior in the few selected areas of activities, the same could not be explained by any of the traditional factors either. Commenting on the declining importance of caste status, Srinivas writes: "As a result of increased secularization and

mobility and the spread of an equalitarian ideology, the caste system is no longer perpetuating values traditionally considered to be an essential part of Hinduism."[11]

But it will be an overstatement to say that the traditional status system has been completely superseded by the modern occupational status system. The factory under study is located in the largest and the most industrialized city of India and it employs over eight thousand persons. In terms of wages, this factory represents a kind of aristocracy among the Indian industrial workers. But even in this factory, the role of religion or caste is not altogether unimportant. While it is true that there is no statistically significant relationship between religion and occupational status, the fact remains that the proportion of Hindus is much larger among the high-status craftsmen than among the machine operators or the assemblers. Similarly, the proportion of upper castes is higher among the machine operators and craftsmen than among the assemblers. The disproportionately higher numbers of Hindus and upper castes in the high status jobs (even though not statistically significant) cannot be the result of accident alone. We know, for example, that Hindus (compared to non-Hindus) and upper castes (compared to lower castes) have definitely more education. And we also know that education is positively related to occupational status. Since the factory seems to prefer the educated worker over the uneducated (at least for the jobs like machine operator and craftsman), the Hindus and upper castes stand a more favorable chance of getting hired for these positions.

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11. Ibid., p. 137.

But the question still reamins: Why do Hindus and upper castes possess more education than the non-Hindus and the lower castes? Discussing the process of westernization among the Indian Muslims, Srinivas suggests that, "a small body of politically powerful Muslims constituted a most important part of the pre-British aristocracy of India, while the bulk of them, converts from the low castes, remained poor and at the bottom of the hierarchy of Muslim castes."[12] Among both Hindus and non-Hindus, then, it is the question of the high castes having access to better facilities and opportunities than the low castes. And, as a result of this, there is a certain amount of continuity between the traditional status system and the modern status system based on occupation. But, to the extent that education rather than caste is the chief criterion in recruitment, it appears that the continuity between the old and the new status system will characterize merely the period of transition. With the opening up of both educational and occupational opportunities to members of lower castes, we may expect that in the course of time the occupation-based modern status system will become increasingly "independent" of the traditional criteria of social ranking.

Implications of the Findings

This study was designed to test, among other things, the proposition that certain social-psychological phenomena (e.g., worker satisfaction) can be predicted on the basis of a knowledge of a person's position in the social structure. While such a proposition might hardly need any more "proofs" of its validity, it was felt that much

12. Ibid., p. 73.

of the existing evidence in its support was based essentially on the experience of the American worker. And it was, therefore, decided to further examine the validity of this theory in a different socio-cultural setting. As part of a four-nation study under the directorship of Professor William H. Form, India was chosen for the present project, for this country is sufficiently removed from the United States not only in physical distance but also in such important respects as level of industrial development and socio-cultural background. In this sense, therefore, the findings of this study importantly add to much-needed research at the cross-national level.

But it was not a direct comparative study. We focused only on one automobile factory in India, and in one sense, it is a case study of that factory. However, to the extent that the entire theoretical framework of the study was derived from similar research in the United States (including the methodology and the measuring instrument itself), we consider this study to be a contribution to the comparative studies of automobile workers. And it is for this reason that we have made frequent references to previous research and opinion in the United States.

As a case study, we have attempted to present an analysis of the processes of social change in one Indian factory, hoping that this will shed some light on such important matters as recruitment, training, and "commitment" of the labor force in a developing society. It is in this sense that we are concerned here with the phenomenon called worker satisfaction or commitment, and we will have failed in our task if the study is seen as nothing more than another investigation of job satisfaction. As the findings suggest,

the traditional Indian culture appears to present no serious obstacles in the way of Indian automobile workers in either accepting employment in industry or becoming committed to industrialism. And what is even more important, their commitment (or lack of it) can be accounted for not in terms of their traditional background, but by the occupational status in the factory. We agree with Kerr that "the future into which workers were going is much more determinative of what happens to them than the past from which they are drawn."[13] In a similar vein, though in a different context, Snow concurs that in scientific teachability, tradition and technical background seem to count for surprisingly little.[14]

Reviewing some of the literature on recruitment and commitment of the Indian labor force, Lambert has pointed out the disagreements reflected by the varying positions taken on the subject.[15] He attributes these disagreements to the different levels of generalization, and in part to taking different sub-sets of data from a wide variety of situations and times in India. The evidence presented in this study can hardly resolve the controversy as to whether or not the Indian labor force is "committed" as, for one thing, this study, too, is based on a very special sub-set of data. But our findings appear to support those of Lambert. Both studies generally agree with those like Myers and Morris, among others, who maintain that recruitment

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13. Clark Kerr, "Changing Social Structures," in Moore and Feldman (eds.), Labor Commitment and Social Change in Developing Areas, New York: Social Science Research Council, 1960.

14. Charles P. Snow, The Two Cultures and the Scientific Revolution, New York: Cambridge University Press, 1963, Chapter 4.

15. Lambert, op. cit., page 80.

and commitment of industrial labor force has not been an insurmountable problem in India. Of course, the evidence in this study is based essentially on worker orientations as manifested in their likes and dislikes about the various aspects of their work experience. We lack data on such important matters as turnover, absenteeism, and productivity, each of which reflects to some extent the commitment of a worker.

While the study of worker satisfactions is considered justified, at least for the purposes outlined above, the lack of relationship between worker satisfaction and worker behavior was surprising. Of course, the absence of a relationship in this case could be a result of our imprecise measures of behavior. But, if that is not the case then we are justified in raising questions about the unbridled investigations of job satisfaction, which generally assume that worker satisfaction is positively reflected in his behavior.

Some years ago Brayfield and Crockett undertook a critical survey of research on the relationship between employee attitude and employee performance. These authors conclude that there is little evidence in the available literature that employee attitudes bear any simple or appreciable relationship to performance on the job.[16] Although we did not measure in any way worker's performance on the job, our limited evidence based on work attendance and union involvement seems to confirm the above conclusion. Another review of research on job attitudes seems to suggest that there does appear

16. Arthur A. Brayfield and Walter H. Crockett, "Employee Attitudes and Employee Performance," Phychological Bulletin, 52, 5 (1955), pp. 396-424.

to be an association between such attitudes and certain aspects of worker behavior. For example, Herzberg and associates conclude that:[17]

1. "... in approximately half of the studies reported workers with positive job attitudes outproduced workers with negative job attitudes.

2. "Positive job attitudes were more unequivocally related to the worker's tendency to stay with the job.

3. "There is some evidence to show that workers with positive job attitudes have fewer accidents and fewer psychosomatic illnesses."

Needless to say, we have no data on any of the several areas of worker behavior listed by Herzberg and associates and, therefore, this study cannot resolve the debate as to whether or not job attitudes are in fact related to worker behavior. This is clearly an important area for further investigations, for the lack of relationship between worker satisfaction and worker behavior (as revealed by this study) poses a challenge to the behavioral scientist and at the same time demands a critical examination of that type of research which aims at merely ascertaining people's attitudes.

Another critical area that this study failed to investigate is the family relationships of the worker. The neglect of this important aspect of worker's life (along with others like community and neighborhood of residence) was of course no accident. Given the fact that it became impossible to study in depth both the in-plant and out-of-plant behavior of the workers, a decision had to be made in favor of focusing on the factory because of the more important theoretical

17. Frederick Herzberg et al., Job Attitudes: Review of Research and Opinion, Pittsburgh, Pa.: Psychological Service of Pittsburgh, 1957, Chapter IV.

concerns of the study. We feel that similar attention paid to the activities of the worker at home as well as in his neighborhood and community would have provided useful data with which to explain several of the anamolous findings that this study has revealed.

Finally, as far as the major task of this study was concerned - that is, to explore and specify the relationships between occupational status and worker satisfaction - the theory proposed by Inkeles[18] and that by Blauner[19] has found general support in this study.

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18. Alex Indeles, "Industrial Man: The Relation of Status to Experience, Perception, and Value," American Journal of Sociology, 66 (1960), pp. 1-31.

19. Robert Blauner, Alienation and Freedom: The Factory Worker and His Industry, Chicago: University of Chicago Press, 1964.

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APPENDICES

Appendix A

Comparison of certain characteristics of the sample workers vis-a-vis total factory population (referred to in Chapter II)

Characteristic	Total factory population (as on Dec. 31, 1964)	Sample workers (as in 1965)
1. Age		
Up to 20 years	1%	-%
20-25 years	13	15
25-30 years	26	30
30-35 years	23	22
35-40 years	16	14
40-50 years	17	15
50 +	4	4
Total	100%	100%
N =	5,771	262
2. Seniority		
2 years or less	7%	7%
3-4 years	14	10
5-9 years	42	47
10-14 years	28	28
15 years or more	9	8
Total	100%	100%
N =	5,771	262
3. Mother Tongue*		
Marathi	59%	60%
Hindi	12	8
Urdu	7	9
Gujarati	6	7
Kanadi	6	6
Telugu	1	1
Others	9	9
Total	100%	100%
N =	5,771	262
4. Religion**		
Hindu	81.7%	69%
Muslim	8.5	11
Christian	7.6	8
Jain	1.7	5
Jew	.1	1
Buddhist	.4	6
Sikh, Parsi		
Total	100%	100%
N =	5,846	262

* The major differences between the sample and the population are observed for Hindi and Urdu languages. There are fewer Hindi-speaking and slightly more Urdu-speaking workers in the sample than in the total population. These two languages are two of the North-Indian languages. Both are quite similar to each other as spoken languages, but have different scripts. It is suspected that in the original survey of the total population, some of the Urdu-speaking workers have been erroneously classified as Hindi-speaking.

** The main differences here arise in the case of Hindus,Jains, and Buddhists. There are fewer Hindus and more Jains and Buddhists in the sample, compared to the total population. Both Jains and Buddhists are the off-shoots of Hinduism and are quite similar to the latter except of course in theological details. There is a general tendency in India to mistake a Jain or a Buddhist for a Hindu and it appears that, in compilation of the statistics for the total population, some of the Jain and Buddhist workers had been treated as Hindus.

Note: The total population described above includes all daily-rated workers in the factory, both production and non-production workers, but excludes monthly-rate employees such as clerks, supervisors, and the like.

Appendix B

Sample Data

Place of Birth	N	%
Rural	104	39.7
Urban	93	35.5
Not ascertained	65	24.8
	262	100.0

Father's Education		
Less than 4th grade (including no education)	99	37.8
4th - 7th grade	85	32.4
More than 7th grade	51	19.5
Not ascertained	27	10.3
	262	100.0

Father's Occupation		
Agriculture	89	34.0
Business and services	119	45.4
Industrial-manufacturing	49	18.7
Not ascertained	5	1.9
	262	100.0

Religious Affiliation		
Hindu	180	68.7
Muslim	30	11.4
Christian	22	8.4
Others	30	11.4
	262	99.9

Caste Status		
Brahmin group	47	17.9
Maratha group	73	27.9
Artisan group	13	5.0
Village servants, backward castes	47	17.9
Inapplicable (non Hindus)	82	31.3
	262	100.0

Respondent's Education		
No education	24	9.2
Up to 7th grade	128	48.9
8th - 10th grade	63	24.0
Matriculation or higher	47	17.9
	262	100.0

AGE	N	%
21 - 25 years	40	15.3
26 - 35 years	137	52.3
36 years or more	85	32.4
	262	100.0
MARITAL STATUS		
Single	49	18.7
Married	213	81.3
	262	100.0
NUMBER OF CHILDREN		
None (includes unmarried)	94	35.9
1 - 2 children	83	31.7
3 or more children	85	32.4
	262	100.0
MOTHER TONGUE		
Marathi	158	60.3
Hindi	20	7.6
Urdu	24	9.2
Gujarati	18	6.9
Kanadi	15	5.7
Telugu	2	.8
Others	25	9.5
	262	100.0
OCCUPATIONAL BACKGROUND		
Agriculture	37	14.1
Business and services	112	42.7
Industrial-manufacturing	83	31.7
Inapplicable (includes those for whom Premier is the first job)	30	11.5
	262	100.0
SENIORITY IN PREMIER		
1 - 4 years	47	17.9
5 - 9 years	122	46.6
10 years or more	93	35.5
	262	100.0
WAGES (including dearness allowance)		
Up to Rupees 234 per month	149	56.9
Rs.234 - Rs.286 per month	60	22.9
Rupees 286 and above	53	20.2
	262	100.0

Appendix C

STATISTICAL PROFILES OF THE THREE OCCUPATIONAL STATUS GROUPS ALONG SEVERAL DIMENSIONS (SEE CHAPTER III)

Characteristics	Occupational Status Low	Medium	High	Total	Level of Significance
1. Place of Birth					
Rural	76%	59%	58%	65%	$X^2 = 7.834$
Urban	24	41	42	35	d.f. = 2
Total	100	100	100	100	$P < .02$
N	(88)	(85)	(89)	(262)	$C = .249$
2. Grandfather's Occupation					
Agriculture	70%	47%	53%	57%	$X^2 = 8.967$
Business & Serv.	22	41	32	31	d.f. = 4
Industrial/Mfg.	8	12	15	12	$P < .10$
Total	100	100	100	100	$C = .270$
N	(73)	(68)	(75)	(216)	
3. Father's Occupation					
Agriculture	45%	27%	30%	35%	$X^2 = 8.990$
Business & Serv.	41	54	45	46	d.f. = 4
Industrial/Mfg.	14	19	25	19	$P < .10$
Total	100	100	100	100	$C = .249$
N	(88)	(84)	(85)	(257)	
4. Respondent's Occupational Background					
Agriculture	32%	9%	1%	14%	$X^2 = 41.832$
Business & Serv.	43	40	46	43	d.f. = 4
Industrial/Mfg.	25	51	53	43	$P < .001$
Total	100	100	100	100	$C = .504$
N	(87)	(85)	(89)	(261)	
5. Religious Affiliation					
Non Hindus	35%	34%	25%	31%	$X^2 = 2.738$
Hindus	65%	66%	75%	69%	d.f. = 2
Total	100	100	100	100	$P < .30$
N	(88)	(85)	(89)	(262)	

Characteristics	Occupational Status Low	Medium	High	Total	Level Significance
6. Caste Status (for Hindus)					
Artisans & other lower castes	39%	30%	31%	33%	$X^2 = 1.362$
Maratha group	35	43	43	41	d.f. = 4
Brahmin group	26	27	26	26	$P < .90$
Total	100	100	100	100	
N	(57)	(56)	(67)	(180)	
7. Level of Education					
Up to 7th grade	73%	45%	56%	58%	$X^2 = 14.124$
8th grade or more	27	55	44	42	d.f. = 2
Total	100	100	100	100	$P < .001$
N	(88)	(85)	(89)	(262)	$\bar{C} = .330$
8. Seniority in Premier					
1 - 4 years	17%	27%	10%	18%	$X^2 = 9.679$
5 - 9 years	48	45	47	47	d.f. = 4
10 yrs. or more	35	28	43	35	$P < .05$
Total	100	100	100	100	$\bar{C} = .256$
N	(88)	(85)	(89)	(262)	
9. Present Monthly Wages					
Up to Rupees 234	67%	65%	39%	57%	$X^2 = 17.576$
Rs. 235 - Rs.286	19	19	30	23	d.f. = 4
Over Rupees 286	14	16	31	20	$P < .01$
Total	100	100	100	100	$\bar{C} = .340$
N	(88)	(85)	(89)	(262)	
10. Age of Worker					
Up to 25 years	10%	26%	10%	15%	$X^2 = 11.779$
26 - 35 years	52	46	59	52	d.f. = 4
Over 35 years	38	28	31	33	$P < .02$
Total	100	100	100	100	$\bar{C} = .281$
N	(88)	(85)	(89)	(262)	

Characteristics	Occupational Status Low	Medium	High	Total	Level of Significance
11. Marital Status					
Single	15%	22%	19%	19%	$X^2 = 1.648$
Married	85	78	81	81	d.f. = 2
Total	100	100	100	100	P <.50
N	(88)	(85)	(89)	(262)	
12. Number of Children					
None	33%	45%	30%	36%	$X^2 = 6.313$
One or two	28	30	36	32	d.f. = 4
Three or more	39	25	34	32	P <.20
Total	100	100	100	100	
N	(88)	(85)	(89)	(262)	
13. Pattern of Occupational Mobility					
Steady "down" or fluctuating "down"	14%	13%	8%	11%	$X^2 = 21.905$
Fluctuating (equal "ups" & "downs")	20	13	17	17	d.f. = 6
No Movement (incl. only one job)	32	14	12	20	P <.01
Steady "up" or fluctuating "up"	34	60	63	52	$\bar{C} = .353$
Total	100	100	100	100	
N	(88)	(85)	(89)	(262)	
14. Occupational Status (Department)					
Assembly Depts.	72%	28%	27%	42%	$X^2 = 58.248$
Production Depts.	27	60	47	45	d.f. = 4
Tool Room, Repairs	1	12	26	13	P <.001
Total	100	100	100	100	$\bar{C} = .578$
N	(88)	(85)	(89)	(262)	