

REFERENCE GROUP AND WORKER SATISFACTION:
CASE STUDIES OF WORKER SATISFACTION
AMONG NIGERIAN FACTORY WORKERS

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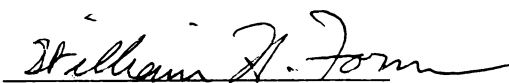
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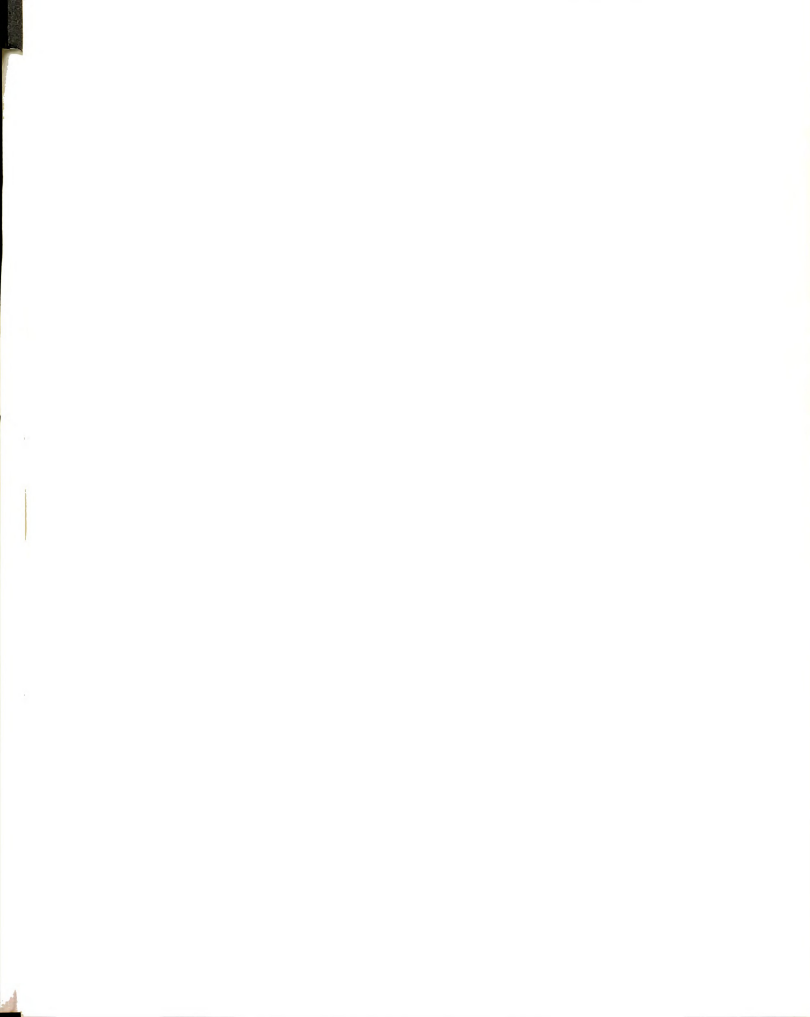
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ABSTRACT

REFERENCE GROUP AND WORKER SATISFACTION: CASE STUDIES OF WORKER SATISFACTION AMONG NIGERIAN FACTORY WORKERS

by Igolima T. D. Amachree

This dissertation was designed to investigate the social factors that condition the satisfactions and dissatisfactions that the Nigerian industrial worker derives from his occupational activity. To the extent that the self arises and functions and is maintained through continued interaction with significant others in a symbolic social situation, this study attempted to delimit these significant others and to identify their social locations in order to determine their influence on worker satisfaction. The interactive situation ineluctably predisposes the worker to certain invidious comparisons with significant others or reference group members, and the results of such comparisons predispose the worker to certain patterns of satisfactory or dissatisfactory behavior. The central organizing hypothesis for this study, therefore, is that reference group comparisons are significantly related to worker satisfaction. In addition, the study sought to investigate the shifting sources of reference group selection. The contention is that the selection of comparative

reference groups is not random but shifts with the processes of industrialization and socialization into the industrial work force. There is a tendency to select congruent reference groups in order to engender effective industrial socialization and commitment. At the initial phase, extended kin members located in non-industrial occupations are selected as reference group members, while at the intermediate phase, extended kin members in industrial occupations are selected. At the final phase, non-kin members in industrial occupations are selected as reference group members. This pattern of selection serves the function of reinforcing socialization.

A sample of 141 Nigerian factory workers from four factories--Metal Containers, Metal Construction, both of which are located in Lagos, the capital of the Federal Republic of Nigeria, Nigerian Bottling Company and Lafia Canning Factory, both of which are located in Ibadan, the regional capital of Western Nigeria--were interviewed in 1965. The sample does not represent a random sample of all factory workers in Nigeria. The selection of a non-random sample of the total work force was due primarily to the problems of gaining entry into other factories to legitimize the study. The sample, however, represents a random sample of the four factories in this study. The interview schedule utilized both forced-choice and open-ended questions and no attempt was made to use composite indices because

of the difficulties of constructing theoretically valid measures for such indices. Contingency distributions constituted the main statistical tool of analysis, while statistical significance was ascertained by means of chi-square and derivative tests. Significance level was set at the conventional .05 level.

The investigation of workers' attitudes in each of the areas of worker satisfaction--sector, occupation, and work--confirmed the general hypothesis that worker satisfaction is significantly related to worker comparisons with reference group members. Furthermore, it confirmed the proposition that satisfaction is not an overall entity but represents discrete clusters of attitudes and feelings. Satisfaction was found to increase with expanding spheres of social activity. Thus workers tended to be less satisfied with their work tasks than with their occupations, and less satisfied with their occupations than with their sectors of employment.

A major substantive finding was that Nigerian factory workers were relatively satisfied with their sector of employment and their occupation but relatively less satisfied with their specific work tasks. However, even this relative dissatisfaction with work tasks represents a fairly healthy sign when the recency of industrial development and the attendant difficulties of adjustment are taken into account.

Besides comparisons with reference group members, skill level (which represents degrees of socialization into industrial life) and urban residence appear to be the major variables that condition sector and occupational satisfaction, while work control and the recognition of the worker's performance by his boss condition work satisfaction. Variables like the performance of traditional obligations such as help to members of the kinship group and demographic variables such as age, education, marital status, number of children and number of wives, were not found to be related to work satisfaction. Skill level, though related to sector and occupational satisfaction, was not found to be related to work satisfaction. Semi-skilled workers were found to be more satisfied with work tasks than skilled workers, and skilled workers slightly more satisfied than unskilled workers. However, in the areas of sector and occupational satisfaction, it was found that satisfaction increased with skill level.

The sector of employment of the worker's father appears to be significantly related to the choice of the preferred sector of employment of the industrial worker. Those whose fathers were employed in non-agricultural sectors are found to be more likely to select non-agricultural sectors of employment than those workers whose fathers were in the agricultural sector.

Significant differences exist among the four

factories. In addition to the fact that they were established at different times--Metal Containers in 1940, Lafia Canning in 1954, Metal Construction in 1958 and Nigerian Bottling in 1962--significant differences were found in the mean age of the workers, marital status, rural-urban residence, skill level, job control, education, patterns of reference group comparisons and worker satisfaction. There were also differences in management policies toward conditions of work and also in union organization.

Finally, in addition to the viability of reference group concept in analyzing worker satisfaction, the study also found a shifting pattern in the selection of reference group members. This pattern followed the degrees of socialization into industrial work. Unskilled workers tend to choose extended kin members in non-industrial occupations, while skilled workers chose extended kin-members in industrial occupations, as reference group members.

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FRONTPIECE

"The sentiments of sociality manifested by various sorts of residues are nearly always accompanied by a desire for the approbation of others, or for avoiding their censure."

-- Vilfredo Pareto

"It is not the consciousness of men that determines their existence, but, on the contrary, their social existence determines their consciousness."

-- Karl Marx

Dedicated to

Data K. Amachree

my grandmother of blessed memory who first
inspired me to seek knowledge and
pursue it,

and

Dr. William H. Form

my teacher, my mentor and my colleague

INTRODUCTION

Most of the technologically underdeveloped countries have recently embarked on various programs of development in order to increase, in the language of Professor Leslie White, their energy utilization. This increase which is usually subsumed under the rubric of modernization or industrialization has been treated, in the main, in purely economic terms and due regard has not been given to the social adjustment of those involved in this process of industrialization. One such area of prime importance to the sociologist involves the kinds of meanings factory workers give to work and the patterns of satisfaction or dissatisfaction they derive from their work. It further involves the different stratification orders that emerge and the kinds of meaningful linkages that factory industrial workers make to these orders.

Industrialization, in our conception, is directly related to an appreciable increase in the number of statuses within a given social system which is a result of the functional division of labor and specialization. These statuses are differentiated and ranked according to some prevailing value system which is usually explicated, in stratification studies in terms of function (Davis-Moore), the position in the line of production (Karl Marx) or wealth,

power and prestige (Max Weber), or a combination of these. This system of differentiated statuses or clusters of statuses is what is referred to in the literature as social stratification. Paul K. Hatt refers to it as a "system of differentially valued positions in all societies."¹ The invidious imputation of differential qualities to these statuses implicates the actor in a set of normative behavior in relation to the statuses. Whether we call this deference patterns (Moore) or authority patterns (Weber), they serve the function of inducing normatively oriented expectations, evaluations and interactions.

The situation in the developing countries is, however, further complicated by the co-existence of a traditional system and an industrial system which interact with and interpenetrate each other. Ideally, the traditional system relies mainly on ascription as a means of distributing statuses and utilizes symbolic norms in articulating status relationships. Relationships are thus said to be particularistic rather than universalistic. Such patterns led Fortes and Evans-Pritchard to conclude in their analysis of African political systems, that "bonds of utilitarian interest between individuals and between groups are not as strong as the bonds implied in common attachment to

¹Paul K. Hatt, "Occupations and Social Stratification," in Sigmund Nosow and William H. Form, Man, Work and Society (N.Y.: Basic Books, Inc., 1962), p. 239.

mystical symbols."¹ The industrial system, on the other hand, ideally relies on achievement criteria in status distribution with utilitarian functional specificity articulating status relationships. Relationships are therefore said to be universalistic.

The existence, side by side, of these two systems in developing countries with a preponderance of the traditional, thus creates a problem of commitment for the industrial worker in terms of the sources of his commitment and by implication his satisfaction. Most satisfaction studies have utilized the job context as an independent variable. Such variables as type of job, co-workers, lighting, supervision, technology, job control, morale, etc., have been used to predict satisfaction. However, only a few have used reference group as an independent variable.² This study utilizes reference group behavior as an independent variable for the analysis of industrial satisfaction. The proposition is that the type of satisfaction an industrial worker gets from participation in industrial work is related to the kinds of comparisons he makes with members of his

¹Meyer Fortes and E. E. Evans-Pritchard, "African Political Systems," in Morton H. Fried (ed.), Readings in Anthropology, Vol. II (N.Y.: Thomas Y. Crowell Company, 1960), p. 295.

²William H. Form and James A. Geshwender, "Social Reference Basis of Job Satisfaction: The Case of Manual Workers," American Sociological Review, Vol. 27, No. 2, April, 1962; see also Martin Patchen, "The Effects of Reference Group Standards on Job Satisfaction," Human Relations, Vol. XI, No. 4, 1958, pp. 303-14.

reference group. There is also an assumption of a developmental pattern in reference group selection as the worker shifts his commitment from the traditional to the industrial. At the initial phases of development, the reference group members tend to be traditional-traditional. That is, those selected as reference group members will be traditionally related extended kin members occupied in traditional, non-industrial activities. At the intermediate phase, as industrialization proceeds, there will tend to be a shift to the selection of extended kin members who are employed in industrial activities. At the final phase of industrialization, non-kin members engaged in industrial activities will be selected as reference group members. The fourth category of industrial-traditional does not logically apply because at this point, theoretically, the whole society has become industrialized which precludes the existence of traditional occupations.

A corollary of the foregoing is the significance of traditional kinship members. To the extent that kin members are important as anchorage points we would expect the performance of traditional duties in terms of help to kin members to be significantly related to worker satisfaction. It is important, also, in connection with kin members that in Nigeria age is still an important ascriptive norm and has the effect of inducing greater interaction among people of about the same age. The significant point

here is that in looking at reference group we may be looking actually at peer group or age cohorts. Thus in this study, peer group and reference group will be used interchangeably as well as being tested.

The focus of this study is to explore the levels of satisfaction of industrial workers. To the extent that satisfaction implies an opportunity cost relative to other situations, and also realizing that satisfaction is not a monistic concept in spite of Hoppock, this study investigates the relative satisfaction of other sectors of the economy to indicate how these affect industrial satisfaction. In addition, this study explores the concept of relative deprivation in relation to peer group in influencing relative satisfaction or dissatisfaction of industrial workers. Other variables, such as job control, urban-rural residence, father's sector of employment, skill level, etc., are also used to predict worker satisfaction.

More concretely, this study intends to find out the level of satisfaction industrial workers have in four selected factories in Nigeria, and what factors contribute to this level of satisfaction. In doing this, the study has utilized reference group theory. It should be pointed out that reference group is used here in a rather restricted sense in terms of those groups that serve comparative and not normative functions.¹

¹R. Merton, Social Theory and Social Structure

Chapter I of this dissertation will deal with the general framework of the study. It focuses on some relevant literature in the area of worker satisfaction and reference group theory indicating the relevance of such a theory to the study of worker satisfaction. Furthermore, this chapter will deal with the general hypothesis deriving from the theoretical linkage between reference group and worker satisfaction. Satisfaction is not regarded as a singular concept, but as an attitudinal variable relating to different arenas of social action. Such arenas include the economic sector, the occupation and the specific work tasks. Chapter II will deal with certain demographic and economic conditions in Nigeria, indicating the developing nature of the economy. This will not be an elaborate discussion of economic development in Nigeria but rather it will be a modest effort to highlight the broad features of a developing economy. In Chapter III, the concern will be mainly with the description of the four factories in the study, outlining the general features of work organization. This will be followed by a description of the operation of plant unions in two of the factories. Only two plant unions are dealt with because data on the operation of the unions in the other two factories could not be obtained.

(Glencoe, Ill.: The Free Press, 1957), p. 283. Our concern is primarily with groups that are used for comparative purposes and not those from which the individual derives his normative orientation.

The concern in Chapter IV will be with the analysis of the data in terms of delineating the profiles of the factories and the industrial workers. In doing this, it takes into account demographic and occupational socialization variables which include age, marital status, rural-urban background, father's occupation, skill level, etc. It further investigates the interrelationships of these variables to provide a profile of the worker.

Chapter V deals with the analysis of the data in terms of the various hypotheses dealing with sector, occupational and work satisfaction. Other variables such as rural-urban background, skill level, father's occupation are also used to delineate worker satisfaction. Finally, this chapter is concerned with the shifting sources of reference group selection as indicators of relative socialization to the processes of industrialization.

The final chapter, Chapter VI, will deal with a summary of the findings, limitations of the study and areas for future investigation.

Field observations were made in the traditional anthropological style, with field notes and pertinent on-the-spot comments which will be used at appropriate points to clarify certain issues in the study.

CHAPTER I

THEORETICAL BACKGROUND TO THE STUDY

"Theory," as used here, does not refer to the realm of the speculative, the unaccomplishable, or to ideas unrelated to existential facts. Rather, it refers to a system of logically interrelated general concepts which have empirical referents.¹ Put differently and more concretely, theory defines the researcher's major orientation by "defining the kinds of data which are to be abstracted; it offers a conceptual scheme by which the relevant phenomena are systematized, classified and interrelated; it summarizes facts into empirical generalizations and systems of generalizations; it predicts facts and finally . . . points to gaps in our knowledge."² The central issue of theory, therefore, is that it is a logical frame of reference with which we structure, directly or derivatively, phenomena in nature or impose order on somewhat unordered groups of phenomena.

¹This coincides with Parsons' conception of theory. See T. Parsons, The Structure of Social Action (Free Press of Glencoe, 1949), p. 6.

²W. J. Goode and P. K. Hatt, Methods in Social Research (N.Y.: McGraw-Hill Book Company, Inc., 1952), p. 8.

1. Reference Group Theory and Its Relation to
Developing Economies and Societies

A central contention of this study is that personal evaluations of worker satisfaction or dissatisfaction are more a function of the social location of the individual and the specific groups to which the worker commits himself for evaluative purposes rather than the intrinsic qualities of the job. Worker satisfaction is therefore seen as a function of reference group behavior. Reference group accordingly provides the theoretical underpinning and the organizing concept for this study.

Reference group, as it is known today, derives from the Hyman study of 1942.¹ In coining the term reference group, Hyman considered it as an anchoring point for the individual, having various weights or influences depending on a variety of factors such as distance from the reference group, mobility of society, number and type of alternative anchorage points, etc. In general, however, he found that status aspirations and status evaluations are influenced by reference groups and that changes in reference groups produced changes in values and judgments.

Generally, reference groups are regarded as those that provide "a frame of reference for self-evaluation and attitude formation."² There is, however, some disagreement

¹H. H. Hyman, "The Psychology of Status," Archives of Psychology, No. 269, 1942.

²Merton, op. cit., p. 283.

in the literature on how extensive or restrictive the reference group concept should be. Kelly¹ and Turner² consider the main problem to be whether reference groups should be defined as any group to which a person relates or from which he derives his attitudes and norms, or whether the concept should be restricted only to those groups from which an individual derives his norms, i.e., whether or not the individual perceives the group to have reinforcing properties for normative behavior. Their concern, so stated, is not with the self-evaluative properties of reference groups in terms of relative deprivation but with normative orientation. Our study considers the self-evaluative properties of reference groups as critical.

Eisenstadt³ and Merton⁴ are representative of the more "extensive" interpretation, arguing that reference groups perform both normative and comparative functions. Kelly⁵ designates these two functions as motivational and perceptual, thus suggesting a possible linkage between

¹Harold H. Kelly, "Two Functions of Reference Groups," in A. E. Swanson, T. M. Newcomb and E. L. Hartley, Readings in Social Psychology (N.Y.: Henry Holt & Co., 1952).

²Ralph H. Turner, "Role-taking, Role Standpoint and Reference Group Behavior," American Journal of Sociology, LXI, 1956, pp. 316-28.

³S. N. Eisenstadt, "Studies in Reference Group Behavior," Human Relations, 7, 1954, pp. 191-216.

⁴Merton, op. cit., pp. 283-84.

⁵Kelly, op. cit.

reference group behavior and more general studies of motivation and perception. The broader definition of reference groups is also implicit in the studies of Hyman.¹

On the other hand, Shibutani,² Sherif and Sherif³ and Newcomb⁴ argue for a more restrictive definition of reference group, limiting it only to role-taking, or normative behavior based on some psychological relationship to the group. Shibutani would further reduce the concept to "any identifiable group whose supposed perspective is used by the actor as a frame of reference in the organization of his perceptual field,"⁵ while Sherif and Sherif restrict it only to "those groups to which the individual relates himself as a part or to which he aspires to relate himself psychologically."⁶

A more perceptive point of view, as it relates to

¹Hyman, op. cit.

²Tamotsu Shibutani, Society and Personality (Englewood Cliffs, N.J.: Prentice-Hall, 1961), pp. 257-58.

³Muzafer Sherif and Carolyn W. Sherif, An Outline of Social Psychology (N.Y.: Harper and Brothers, 1956), pp. 175-78.

⁴T. M. Newcomb, "Attitude Development as a Function of Reference Groups: The Bennington Study," in E. E. Macoby, T. M. Newcomb and E. L. Hartley, Readings in Social Psychology (N.Y.: Henry Holt & Co., 1958, 3rd edition), pp. 265-66.

⁵Shibutani, op. cit., p. 258.

⁶Sherif and Sherif, op. cit., p. 175.

our study, is, however, provided by Chapman and Volkmann¹ who insist that "one way in which the social environment might determine the level of aspiration of a given individual would be through his knowledge of the achievement of groups whose status or ability, relative to his own, he could assess." Though not exactly phrased in terms of our study, it could be rephrased to indicate that the industrial worker's perception of the relative achievement of his reference group members will constitute a point of comparison conditioning his levels of satisfaction with his work.

However, those who take a restrictive definition of the concept do so primarily for the reason that to include under the rubric of reference group all groups which serve as points of comparison and normative orientation is so extensive an interpretation as to render the concept almost useless. Muzafer Sherif, for example, takes this point of view. Actually, the distinction between a broader or narrower definition is not a theoretical issue but rather a question of conceptual limits conditioned by the peculiar problems of research. To the extent that a limited definition consciously and conscientiously controls the recalcitrant limits of phenomena so that they are better studied and understood, it is functional.

¹D. W. Chapman and John Volkmann, "A Social Determinant of the Level of Aspiration," in Maccoby, Newcomb and Hartley, op. cit., p. 282.

This study uses reference groups in a restricted sense in terms of those groups that are used primarily for comparative self-evaluation. It is in this respect that linkages between reference group theory and worker satisfaction can be made in a fruitful manner. It should be borne in mind that reference groups are not always static and in a dynamic society shifts occur both in the social sources of reference group members and also in the kinds of jobs and sectors in which they are located. The observation of Albert Einstein in an address in the Sorbonne highlights the transitory nature of membership groups. "If my theory of relativity is proven successful, Germany will claim me as a German and France will declare that I am a citizen of the world. Should my theory prove untrue, France will say I am a German and Germany will declare that I am a Jew."¹

Industrialization, in our view, is accompanied by shifts in the sources of reference group members and also in the jobs and sectors in which they are located. This means that as industrialization proceeds or as workers become more skilled, reference groups for industrial workers shift from traditional to industrial. To our knowledge, no studies have made this a focus. But it appears to be critical in assessing both the worker's socialization into

¹Quoted from Merton, op. cit., p. 288 (footnote).

the normative patterns of the industrial process and also in his relative commitment to and satisfaction with industrial activity. We assume here that at the initial phases of industrialization or at the early stages of entry into the industrial work force, the source of the worker's reference group members will be traditional, i.e., those who are from the same village or share common symbolic kin-relationships with the worker. They provide a significant anchorage point for the worker in sustaining him at this stage. Such reference group members will also be found in the agricultural sector performing traditional jobs. At the extreme of this is the target worker whose comparative reference group members are located in the traditional system and perform traditional functions. This period at the level of individual career pattern may roughly coincide with what Miller and Form call the "initial period."¹

At the intermediate phases of industrial development or, as skill acquisition in the industrial work force increases, a shift occurs in the worker's reference group. At this stage, the source of reference group members still remains traditional but a shift occurs in the types of jobs

¹D. C. Miller and W. H. Form, Industrial Sociology: The Sociology of Work Organizations (N.Y.: Harper & Row, 1964, second edition), p. 544. It should be noted that these are different conceptions and dimensions and no equivalence is posited. The Miller-Form proposition deals mainly with individual career patterns while we are concerned with gross adjustment to the processes of industrial development.

they perform and also in the sector in which they are located. Even though they still have symbolic kinship ties with the worker, they are now located in the industrial sector and perform industrial jobs. They thus perform a transitional function not only of providing symbolic anchorages but also of orienting the worker to the industrial work force. These are congruent patterns and it will be dysfunctional to the socialization and industrial adjustment of the worker to have reference group members who have traditional occupations.

Finally, at a more mature or final phase of industrialization both the source and occupational location of reference group members shift to the industrial. This is also a congruent pattern. Manning Nash indicates quite appropriately that "a developed labor force depends on the proliferation of ties and social relations connected with industrial work."¹ The selection of comparative reference groups is not random and it is our contention that it shifts with the processes of industrialization and thus constitutes a fruitful means of evaluating relative degrees of industrialization and labor commitment.

The final stage of industrial source and traditional occupation is logically inconsistent because at this stage,

¹Manning Nash, "Kinship and Voluntary Association," in Wilbert E. Moore and Arnold S. Friedman, Labor Commitment and Social Change in Developing Areas (N.Y.: Social Science Research Council, 1960), p. 325.

theoretically, the whole society has become industrialized and therefore there could not be any traditional occupation. At this stage, it is expected that even farming would have become industrialized and highly bureaucratized so that it no longer resembles the traditional type of farming. However, it is possible for non-work-related relationships to be predominant but again this represents a qualitatively different dimension from a traditional occupation. The only condition under which cell four in Figure 1 will be consistent will be if the whole society again reverts to traditional patterns. Our assumption is that this is not possible.

Our proposition can be illustrated thus:

The Shifting Bases of Reference Group Selection
Source of Reference Group

Sector and job of reference group	Source of Reference Group	
	Traditional (kin)	Industrial (non-kin)
Traditional	(1) Initial Phase of Industrializa- tion	(4) Super Mature Industrializa- tion (Logically inconsistent)
	(2) Intermediate Phase of Indus- trialization	(3) Mature or Final Phase of Industrializa- tion

Figure 1. Conceptual Scheme

There is no implication here about the demise of the larger kinship group and the emergence of nuclear

families as Nash argues: "The overwhelming impression gained from the material on East Africa is that industrialization is creating something of a vacuum in social life by destroying kinship groups."¹ Nor are we concerned with the persistence of these kinship groups in the face of industrialization as Greenfield argues: "An examination of both comparative and historical evidence indicates that, developmentally, there is no necessary and sufficient causal relationship, whether expressed in terms of necessary functional interdependence or consequence between the small nuclear family and urbanization and industrialization."² The primary concern here is with the shifting bases of reference groups as foci for worker socialization and satisfaction.

Put in this manner, reference groups can be conceived as structural variables which are expressed in terms

¹Nash, op. cit., p. 324. Also see Clark Kerr, John T. Dunlop, Frederick Harbison and Charles A. Myers, Industrialism and Industrial Man: The Problems of Labor and Management in Economic Growth (Cambridge, Mass.: Harvard University Press, 1960), p. 82.

²Sidney M. Greenfield, "Industrialization and the Family in Sociological Theory," in Kinship and Family Organization, Bernard Farber (ed.) (N.Y.: John Wiley & Sons, Inc., 1966), p. 417.

Vide also Erwin Johnson, "The Stem Family and Its Extensions in Modern Japan" (paper presented at the Annual Meeting of the American Anthropological Association, Minneapolis, Minnesota, 1960), p. 13.

And also Philip Garique, "French Canadian Kinship and Urban Life," American Anthropologist, LVIII, Dec., 1956, pp. 1098-99.

of the pattern and type of reference group. These structural variables condition the emergence, through interactive and relational patterns, of self-evaluation in relation to reference group members. This self-evaluation within the structural context of reference group has a tendency of inducing attitudinal or behavioral patterns which take the form of the expression of satisfaction or dissatisfaction or turnover or absentee rates. These can be illustrated thus:

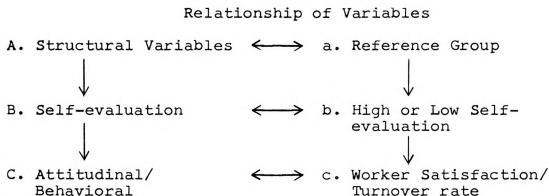


Figure 2. Conceptual Pattern of Relationship of Variables

Put in this way, it becomes clearer to see the contention that behavior or attitude expressed toward the industrial system either in terms of the expression of satisfaction or dissatisfaction, or in turn-over or absentee rates, is a function of the self-evaluation the industrial worker makes with respect to the structural variables--reference group. A general proposition that emerges is that worker satisfaction will vary directly with self-evaluation

in relation to reference group. Specifically, satisfaction with the industrial sector is directly related to self-evaluation in relation to reference group members in other sectors. Furthermore, satisfaction with occupation or work is directly related to self-evaluation with regard to reference group members in other occupations or work tasks.

2. Job Satisfaction

Most studies of job satisfaction or worker satisfaction have concerned themselves primarily with satisfaction conditioned by the factory situation without seriously relating it to larger societal variables. This primary concern with the factory without relating its dynamic functioning to larger social categories has earned for it the veritable epithet of "plant sociology."¹ It must be admitted immediately that this approach of regarding the factory system qua system has led to very interesting and significant discoveries. The classic example is the Western Electric Study of Elton Mayo and his associates.² The ideology of the worker that emerged from this and other related studies was that of a group member. That the types of satisfaction

¹Clark Kerr and Lloyd H. Fisher, "Plant Sociology: The Elite and the Aborigines," in Mira Kamorovsky (ed.), Common Frontiers of the Social Sciences (Glencoe: Free Press, 1957), p. 285.

²Elton Mayo, The Social Problems of an Industrial Civilization (Cambridge, Mass.: Harvard University Press, 1945).

the worker has, derived from his participation in a group setting which is located within the factory. To increase or affect his satisfaction, therefore, it was necessary to increase his group participation. Viewed in this way, co-workers become critical to worker satisfaction and the leap from this position to morale and esprit de corps studies is only too apparent.¹ Most morale studies have this view of the worker--that the conditions imposed on him by his immediate work or factory group are the only critical variables in worker satisfaction. The research implications of such a view of the worker and his satisfaction are obvious.

However, such a limited, extremely factory-group oriented view of the worker derives from the implications of earlier studies which have viewed the worker either as a biological machine or as an individual personality. These represent, respectively, the scientific management school and the industrial psychology school. The inability of Elton Mayo to lift himself above the confines of the factory group may derive in part from his training in psychology, in part from the very nature of a pioneering study, and in part from the continuity of thought in factory studies.

¹The views on the various images of the worker in this section derive from classroom discussions with Dr. William H. Form and also from Miller and Form, op. cit., pp. 643-86.

The industrial engineering school derives primarily from Frederick W. Taylor, who postulated the view of the worker as an organic machine. Accepting rather uncritically the concept of the economic man, which states that man acts rationally, to his own interests and calculates utilities, Taylor went on to elaborate his system of time and motion studies, work simplification and control of such environmental conditions as light, heat, color, noise, etc. Taylor viewed the motivation of the worker, that is, the source of satisfaction, as stemming from pay and other financial inducements, stating about a worker named Schmidt (which could be generalized to industrial workers), "A penny looks about the size of a cart wheel to him."¹

The next view of the worker, which has been termed "recessive,"² is that of the psychological man, individualized and individuated. Here it is assumed that intelligence, ability, skill and temperament are predictive of the industrial worker's behavior. Deriving its impetus initially from stimulus-response studies, its thought of satisfaction as emanating primarily from a reward-punishment or what has been aptly described as a "carrot-and-stick" approach, where the rewards are seen mainly in terms of pay. Here

¹Frederick W. Taylor, "A Piece Rate System, Being a Step Toward Partial Solution of the Labor Problem," A.S.M.E. Transactions, Vol. 16, 1895, pp. 586-883.

²Miller and Form, op. cit., p. 646.

again, satisfaction is linked to pay and somehow the earlier predisposing psychological variables disappear. This view of the derivation of worker satisfaction was current around 1920-1940.

These two views of the worker served as conditioning factors for Elton Mayo and his associates,¹ in the sense that, in trying to extricate the worker from the constricting forces posited by the two schools of thought and to highlight the social, he was practically forced to start from the work group and never managed to get above it. Thus he considers the effect of management on absenteeism "most important" in his foreword to the study by Fox and Scott.² The importance of this for our study is the implication that the satisfaction of the worker, expressed in rates of absenteeism or labor turnover, is directly derived from management policies and that larger societal factors are considered to be not only ephemerally operative and not crucial.³

Besides these theorists who only by implication and merely inferentially concerned themselves with satisfaction, there were others who, following the lead by

¹Elton Mayo, The Human Problems of an Industrial Civilization (N.Y.: Viking Press, 1960).

²J. B. Fox and J. F. Scott, Absenteeism: Management's Problem (Boston, Mass.: Harvard University: Graduate School of Business Administration, 1943), p. iv (Foreword).

³Ibid., p. 28.

Hoppock,¹ were concerning themselves primarily with satisfaction as a legitimate field of inquiry. After all, the worker has been viewed as a dissatisfied person and alienated from his work since the nature of his work precluded him from liking his work. Indeed Karl Marx had declared earlier in his Economic and Philosophical Manuscripts:

In his work, therefore [the worker] does not affirm himself but denies himself, does not feel content but unhappy, does not develop freely his physical and mental energy but mortifies his body and ruins his mind. The worker therefore only feels himself outside his work, and in his work feels outside himself. He is at home when he is not working, and when he is working he is not at home. His labour is therefore not voluntary, but coerced; it is forced labour. It is therefore not satisfaction of a need; it is merely a means to satisfy needs external to it. Its alien character emerges clearly in the fact that as soon as no physical or other compulsion exists, labour is shunned like the plague. External labour, labour in which man alienates himself, is a labour of self-sacrifice, of mortification.²

The question was rephrased in a universalistic sense: "What does the worker actually want from his job?" In answer to this question there has not been a dearth of studies as the works of J. Hoppock, William Form, William Faunce, Mason Haire, Frederick Herzberg, Bernard Mausner and Barbara Synderman, Robert Dubin, Katz and Kahn, Robert Blauner, Franca Magistretti, Ely Chinoy, Walker and Guest, Zaleznik and his associates, E. Wright Bakke, Theodore Purcell,

¹R. Hoppock, Job Satisfaction (N.Y.: Harper, 1935).

²Karl Marx, Economic and Philosophical Manuscripts of 1844 (Moscow: Foreign Languages Publishing House).

Gladys Palmer, Nancy Morse and Robert Weiss, H. A. Robinson, George Johnson and others on an ever growing list of works will indicate. Even economists like Shister and Reynolds¹ have also joined the list in indicating that "independence and control" were the crucial ingredients accounting for job satisfaction and dissatisfaction. In a number of these studies such variables as control, supervision, technology, responsibility, isolation, involvement, skill level and the like have been used as predictive of satisfactory or dissatisfactory behavior. Blauner,² Faunce,³ and Walker and Guest,⁴ for example, have utilized technology as conditioning satisfaction while Purcell,⁵ Palmer,⁶ and Morse and Weiss⁷ have used job control. Still others like

¹Joseph Shister and Lloyd Reynolds, Job Horizons (N.Y.: Harper & Brothers, 1949).

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

³William A. Faunce, "Automation and the Automobile Worker," Social Problems, 6, 1 (Summer, 1958), pp. 68-77.

⁴C. Walker and R. H. Guest, The Man on the Assembly Line (Cambridge, Mass.: Harvard University Press, 1952).

⁵Theodore Purcell, The Worker Speaks His Mind on Company and Union (Cambridge, Mass.: Harvard University Press, 1954).

⁶Gladys Palmer, "Attitudes to Work in an Industrial Community," American Journal of Sociology, LXIII, 24, 1957.

⁷Nancy C. Morse and Robert S. Weiss, "The Function and Meaning of Work," American Sociological Review, XX, 1955, pp. 191-98.

Magistretti¹ and Chinoy² have used structural variables in factories as conditioning variables. These approaches are seen as essentially correcting the shortcomings of earlier studies of motivation.

The beginnings of a new view of worker satisfaction which takes into account the larger societal context and the growing dissatisfaction with extremely factory-oriented studies can be seen in Kornhauser's seminal article in which he put forward the view that "the investigator can understand and interpret the local morale picture only if he is fully alive to the vastly significant influences which lie entirely outside the company--the social and economic conditions in the community and in the world at large."³ In spite of this, very few studies have taken into account larger societal factors as conditioning levels of satisfaction. The few exceptions include Zaleznik and his associates⁴

¹Franca Magistretti, "Sociological Factors in the Structuring of Industrial Workers' Teams," American Journal of Sociology, LX (May, 1955), pp. 536-40.

²Eli Chinoy, Automobile Workers and the American Dream (Garden City, N.Y.: Doubleday Co., 1955).

³Arthur Kornhauser, "Psychological Studies of Employee Attitude," Journal of Consulting Psychology, 8, August, 1944, p. 142 (emphasis mine).

⁴A. Zaleznik, G. R. Christensen and F. J. Roethlisberger, with George Homans, The Motivation, Productivity, and Satisfaction of Workers: A Prediction Study (Cambridge, Mass.: Harvard University Press, 1952).

who included in their prediction study such societal factors as "social investments status." Form and Geschwender¹ and, more related to our study, Patchen² have enlarged their perspectives in their studies to include social references in accounting for worker satisfaction.

The next section will deal with a description of these three studies and two other studies which were conducted in Nigeria and Southern Rhodesia. The main purpose is to use them in formulating the foci of our study, i.e., in deriving the variously related hypotheses. These hypotheses will be stated briefly and in broad terms but will be taken up in greater detail in the chapter dealing with the analysis of the data. This is done mainly for the sake of parsimony.

3. Some Empirical Studies

From September, 1954, to December, 1956, Zaleznik and his associates³ undertook a research involving fifty workers in a medium-sized manufacturing company in the United States. They observed work behavior, interpersonal relations in addition to collecting data on productivity. Their study, couched in motivational terms, was concerned with predicting motivation, satisfaction, productivity and

¹Form and Geschwender, op. cit.

²Patchen, op. cit.

³Zaleznik et al., op. cit.

group membership from what they called the rewards and investments structure. The rewards are either external or internal. External rewards such as pay, seniority, responsibility, etc., flow from the organization which utilizes them in achieving organizational goals. Internal rewards result from the informal friendship organization which uses these rewards in satisfying the worker's need for "association, friendships, approval, support, participation and belonging."¹ The relationship between rewards and motivation is mediated by the kinds of investment the worker brings to the work. Such investments include education, age, sex, ethnicity, seniority, etc. In their view, the worker constantly computes his reward-investment structure and "when the investments of a member of a group are greater than those of others but his returns are less, a condition of felt injustice exists."² Through the investment structure, they managed to work in social variables external to the industry.

One of the main shortcomings of this study besides the failure to extend the group to cover those outside the industry, is the use of the concept social justice. There is the assumption that "among persons, groups or jobs where we find status congruence to exist in fact we do not assume,

¹Ibid., p. 37.

²Ibid., p. 54.

expect or often find a certain kind of trouble."¹ Here status congruence is used as the matching of investments to rewards, i.e., Rewards = Investments. Our study contends that even though a worker might find his rewards to be equal to his investments, he may still be dissatisfied or produce "certain kinds of trouble," if by comparing himself with his peer group he discovers that their investments and rewards are higher than his.

However, of primary concern to our study are their findings on the determinants of satisfaction. They found that group membership in terms of regular/non-regular was critical to satisfaction dichotomized into high and low. Using a chi-square analysis, they obtained a relationship between group membership and satisfaction that was significant at the .01 level. They also found a significant relationship between ethnicity dichotomized into Irish and non-Irish and satisfaction. In addition to this, a number of other findings were recorded. Female workers tended to be more satisfied than male workers.² Workers who were being rewarded by the group with regular membership tended to be highly satisfied regardless of their reward by management as measured by the reward-investment index.³ They

¹Ibid., p. 52.

²Ibid., p. 284.

³Ibid., p. 285.

found no relationship among non-regulars, between social background and satisfaction.¹ Finally they indicate that "workers who were members of regular sub-groups (being rewarded by the group) tended to express greater satisfaction than workers who were members of deviant groups or who were isolates (i.e., not rewarded by the group)."²

The critical point brought out by the study is the influence of group membership in determining the patterns of satisfaction an industrial worker gets. Even though they limited group membership to the factory, it definitely serves as a point of departure in enlarging the parameters of the group to include those outside the factory. This aspect is particularly critical to our study where in our view, groups outside the factory, both in the traditional and industrial systems, to a large extent condition the patterns of satisfaction that industrial workers get. In spite of the fact that Zaleznik and his associates talked about "investments of a member . . . greater than those of others,"³ they never used reference group as a unifying concept for their study. Our contention is that comparative reference groups provide comparative anchorage points for work satisfaction.

¹Ibid., p. 285.

²Ibid., p. 287.

³Ibid., p. 54.

A study that tended to correct this shortcoming was conducted by Form and Geschwender.¹ The study attempted to demonstrate "the utility of social explanation for personal appraisals of life situations."² This study forms part of a larger study which was conducted by J. Allan Beegle, William H. Form and Sigmund Nosow. In their research design, Form and Geschwender explain the proposition they derived from their theoretical position thus: "Job evaluations are not so much a function of their [manual workers] aspirations or that of their parents, but a response to the occupational position which their parents and brothers occupy."³ From this, the general hypothesis was derived that "if these relevant others occupy positions above the subject, he should feel less satisfied with his job situation, or if they are at the same level or lower level, he should feel relatively more satisfied."⁴ This view corresponds to our position in this study that reference group behavior is relatively more important than the actual conditions of work in conditioning work satisfaction or dissatisfaction.

Before discussing the specific test hypotheses and the statistical techniques used in their study, two

¹Form and Geschwender, op. cit.

²Ibid., p. 228.

³Ibid., p. 229.

⁴Ibid., p. 229.

shortcomings of the study should be pointed out in order to clarify the focus of our study. Even though Form and Geschwender quoted Merton with approval in support of their position on reference group, they did not seem to have investigated the distinction Merton made between reference groups and reference individuals. In fact, they seem to have equated reference group with reference individual, thus overlooking the critical insight provided by Merton that "the distinctions between role models, reference individuals, and reference groups generate a distinctive set of problems for investigation."¹ This point is very important but as far as the data were concerned, the distinction did not make much of a difference.

The second, and more important from the point of view of our study, is the question of orientation and technological development. Indeed, this should not be regarded as a criticism since the Form-Geschwender study did not implicate a broader developmental approach except in the movement away from the family as a point of reference as one ascends the occupational hierarchy. Our hunch in Nigeria, which is a newly developing country, will be that the pattern of satisfaction a worker gets as a result of the relative position of his brothers will be mediated by certain symbolic ties and responsibilities. In this case, it will be mediated by the contribution made by the subject

¹Merton, op. cit., p. 304.

to the success of his brothers. This brings to bear the larger traditional system. Thus the Form-Geschwender proposition can be modified for the Nigerian context in this manner:

- (1) If relevant others occupy positions above the subject and he feels he has contributed most in supporting them, he will feel relatively satisfied with his job situation. The rationale for this is that in most newly developing countries, tradition still plays a great part in status distribution and one who feels that he has contributed most to these relevant others' position will feel satisfied to the extent that it indicates the performance of his traditional duties. A skilled respondent in our sample who had earlier voluntarily retired himself to get his retirement benefits and gratuity in order to put his brother, now a manager, through college expressed this point rather succinctly: "I am happy that I am working where I am working. How else could I have been able to do my duty to my family."
- (2) If relevant others occupy positions lower than the subject but he feels that he has contributed much to help these others, he will feel less satisfied with his job situation.
- (3) If relevant others occupy positions lower than the subject but he feels that he has not contributed in helping them he will be dissatisfied with his job situation.

(4) If relevant others occupy positions higher than the subject but he feels that he has not contributed in helping them, he will feel most dissatisfied.

A two-by-two table can help explain this.

	Level of Satisfaction and Contribution to Relevant Others			
	High		Low	
	High	Low	High	Low
Position of relevant others	(1) Most Satisfied	(2) Satisfied	(3) Dissatisfied	(4) Most Dissatisfied

Figure 3.

Another way of looking at this is that the performance of traditional duties, obligations and responsibilities is related to industrial satisfaction.

The four main hypotheses considered by the Form-Geschwender study are:

- a. "There will be no association between job satisfaction of the subject and his occupational level relative to his parents' occupational aspirations for him."
- b. "There will be a positive association between job satisfaction and occupational level of the subject relative to that of his father."
- c. "There will be a positive association between job satisfaction and occupational level of the subject relative to that of his brothers."

d. "There will be a positive association between job satisfaction and generational occupational mobility of the subject relative to that of all those of similar origin, i.e., those whose fathers' occupation was similar to that of the subject's father."

The first two, in our view, refer to role models, the third to reference individuals and the fourth to reference groups. A caveat must be introduced here in the use of reference group to the extent that fine theoretical distinctions can be made between reference groups and reference categories.¹ Such distinctions, however, will not substantially detract from the thrust of the Form-Geschwender study.

The study interviewed 545 manual workers in Lansing, Michigan, between 1950-1951. The final sample for the study included skilled, semi-skilled, unskilled, and "manual clerical" in these proportions: 26.8, 59.8, 11.4 and 2.0 respectively.

The substantive findings of the study confirmed hypotheses (b), (c) and (d), but failed to confirm (a).² In actuality, the study reports that for the first hypothesis

¹Ibid., p. 300.

²The last hypothesis (d) was statistically significant at the .005 level for professional, sales, clerical, etc., and related occupations, at the .0005 for skilled and supervisory levels, .05 level for semi-skilled and .01 level for unskilled workers. The second and third hypotheses (b and c) were also statistically significant at the .0005 level respectively.

four-fifths of the sample reported that their parents had no job aspirations for them. This situation was accounted for by the lack of knowledge of the urban job situation by the parents.

This study is significant and unique in its use of reference group in the study of job satisfaction and therefore incorporates larger social categories in its interpretation than the Zaleznik study. However, its use of reference group is rather restricted in the sense that it focuses only on fathers and brothers. The third study we will describe goes a step further in specifically using peer group as a reference point of job satisfaction. It also specifically links this with the concept of relative deprivation, thus limiting it to comparative reference groups.

Martin Patchen's¹ study dealt with four classes of seventh and eighth grade junior high school pupils. The total sample was 124, with 60 boys and 64 girls. The design used to test his hypothesis consisted of comparing the satisfactions of three groups of subjects. In the first condition which may be called group X, their classmates were performing job task A which was of lower desirability. In the second group Y, their classmates were doing job task B which was a highly desirable job and in the third group Z,

¹Patchen, op. cit. The main study was done as a master's degree thesis in the Department of Sociology and Anthropology at the University of North Carolina.

their classmates were doing the same job as they were doing. This was the control group. All the three groups were performing the same job tasks.

Deriving his propositions from reference group theory and specifically from relative deprivation, Patchen hypothesized that these groups would compare their jobs with those of their classmates and will show patterns of satisfaction or dissatisfaction depending on whether or not they consider their classmates to be doing a job task better or worse than their own. He predicted that members of the group (what he called the deprived group) whose classmates were doing a better job or higher or more desirable jobs will exhibit greater dissatisfaction with their jobs irrespective of the type of job they are doing. Those in the advantaged group, i.e., those who were doing a job more desirable than their classmates would exhibit greater satisfaction with their job. And the control group, those doing the same jobs as their classmates, will be in the middle.

His findings supported the hypothesis that the relatively deprived group, the disadvantaged group, showed greater dissatisfaction with their jobs than the control group. The mean job enjoyment scores of the deprived and control groups, using a t-test, was not found to be significant. The actual mean differences were 3.24 for the control group and 3.65 for the deprived group--the highest

satisfaction being one and the lowest satisfaction being five. The advantaged group also showed a mean satisfaction lower than the deprived group, 3.36, but this was not statistically significant. However, contrary to what was predicted, the advantaged group did not seem to have lower job enjoyment than the control group. The explanation given by Patchen was that "after the experiment most of the members of this group [advantaged group] reported not preferring their own job to the other, although they had preferred their own job before the experiment. . . . A plausible interpretation of this result, consistent with the theoretical ideas . . . revolves about the fact that subjects in the advantaged group were assigned a job which turned out to be more tedious and disagreeable than the pre-experimental description of the job had led them to believe. . . . In this context, subjects could well have felt that they had been misled in what to expect by the experimenter and that their standards of fair treatment had been violated."¹

In spite of the findings of this study, which were not quite statistically significant, the study provides a crucial point of departure for our study where the error reported by Patchen is actually avoided to the extent that industrial workers know what they do and what their peer

¹Ibid., pp. 312-13.

group members are doing. Present in this is not only the notion of visibility but knowledge.

4. Some Further Studies

These three studies of work satisfaction have provided very useful insights for our study in spite of their limitations. However, they represent what might be described as "studies in a different cultural context." This does not imply that they are irrelevant to the context of our study, for, to argue in such a vein will be to take a blind and an extremely relativistic position as to lose sight of the possibilities of scientific discovery and general principles of universal applicability. It is, however, in order to bridge the cultural gap that the next two studies are reviewed and described.

The first study was conducted by Dieter Siebel.¹ The study concerns 160 workers in a Nigerian brewery company, Guinness (Nigeria), Ltd., in Lagos and seeks to find out "the social implications of industrialization in Nigeria."² It is very exploratory and uses simple descriptive statistics which obscure critical problems in determining whether or not a particular pattern of response is statistically significant. Percentages are used without

¹Dieter H. Siebel, "Industrial Labour in Nigeria," unpublished thesis, Universities of Ibadan, Nigeria, and Freiburg, Germany.

²Ibid., p. 3.

a clear indication of their statistical significance. For example, the study concludes, with regard to why workers dislike their job, that "a main reason why they do not like their job is that the job is not interesting, or not according to their knowledge, or is not the job they learned or is not skilled enough."¹ However, the responses to the question which tapped this answer indicate that only five out of the 160 gave this response.² This is only 3% of all the responses to this question. This pattern, which recurs many times in the study, raises the crucial question of whether or not to regard such findings as "rare events." The data would have been more meaningful if such simple tests as t-tests or chi-square were used to establish meaningful relationships.

In spite of this criticism, the study has some interesting and significant findings, which are briefly summarized here. The range of the ages of the workers was between 18 and 60, and the mean age was 27 years. Siebel indicates that this can be accounted for by the fact that "the firm itself is very young. But the main reason is the fact that the elder people stay in village or town to farm or to carry on traditional (or now modernized) village craft, or for trading and that only the younger persons

¹Ibid., p. 62.

²Ibid., p. 43.

leave their home village for the town."¹

Of critical relevance to our study are Siebel's findings on job-liking or job-disliking. Using a 5-point scale--like very much, like much, medium like, do not like, and do not like at all--he obtained the following distribution.

Table 1.1. Distribution of Reasons for Job-Liking

Reasons Given	Percent
Wages	18
Gaining experience and learning new things	18
Like every job	14
Interesting work	11
Like the firm	8
Labor conditions	7
Technical and mechanical job	6
Prestige	<u>1</u>
Total (N = 160)	83*

*Source: Siebel, op. cit., pp. 38-39. The remaining 17% are accounted for by don't knows and other minor categories with 1% each.

¹Ibid., pp. 16-17.

Table 1.2. Distribution of Reasons for Job-Disliking

Reasons Given	Percent
Wages	45
Not according to my knowledge	15
Not interesting	9
Hard working conditions	6
Position too low (lack of prestige)	6
Quarreling, worrisome	<u>4</u>
Total (N = 160)	86*

*Source: Siebel, *op. cit.*, p. 41. The remaining 14% are accounted for by don't knows, and other minor categories with 1% each.

It is quite surprising that Siebel does not regard the responses to the question on job-liking as too reliable because "this might be one of the very few answers given to please the interviewer."¹ This might be so but since we cannot control for the "pleasing" factor it is difficult to assess its significance in influencing the responses and in indicating the direction the responses will "normally" take. However, our pretest in another brewery firm in the northern region of Nigeria--Star Brewery, Ltd.--obtained an entirely different distribution which is given below in tabular form.

¹Ibid., p. 38.

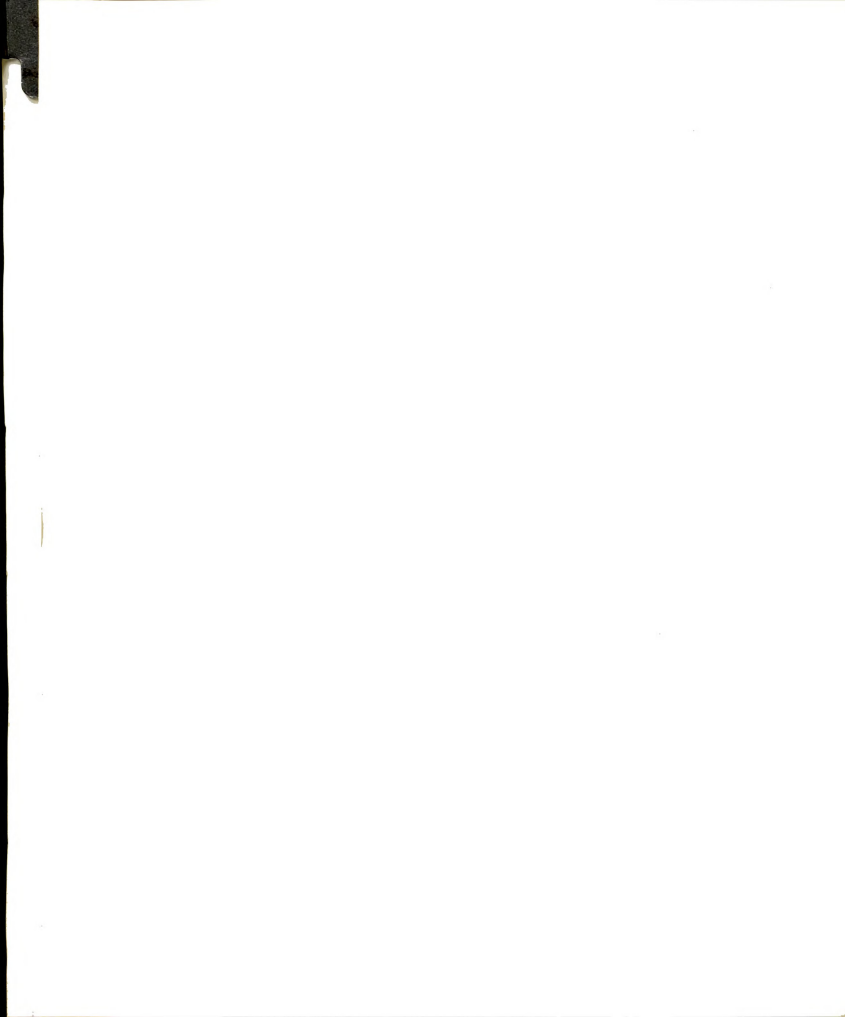


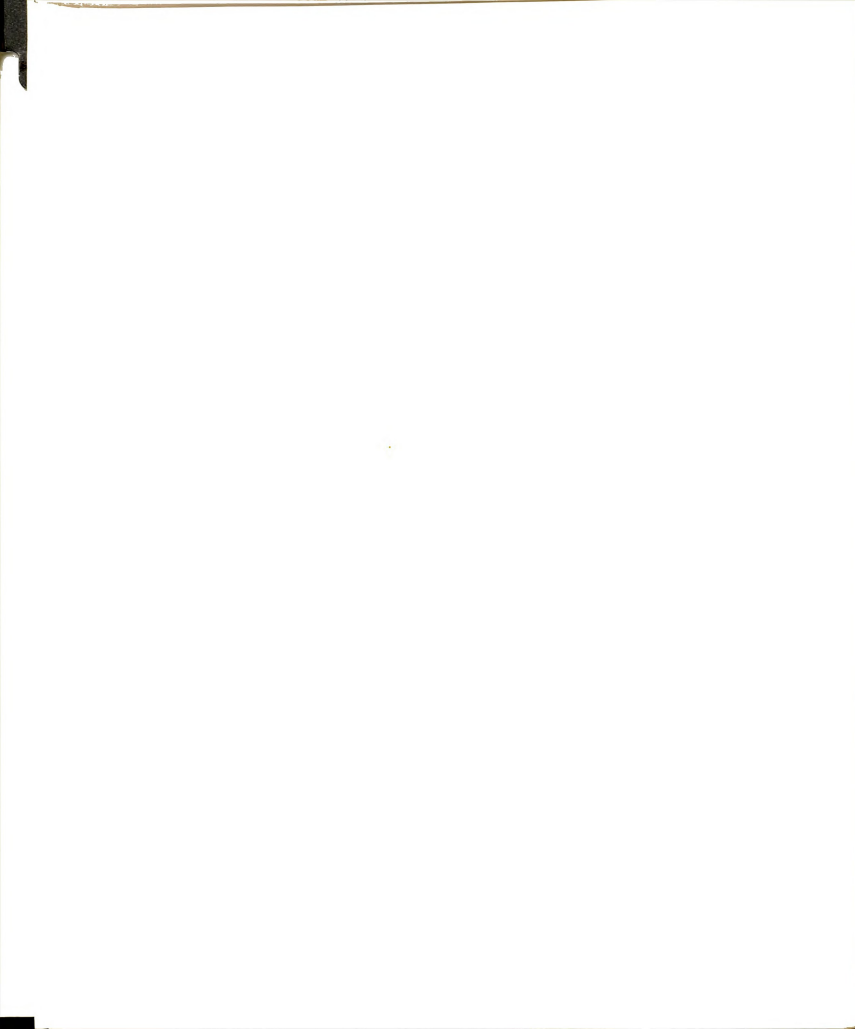
Table 1.3. Distribution of Reasons for Job-Liking (Our Kaduna Pretest)*

Reasons	Percent
Work relations (co-workers and bosses)	63
Overtime wages	19
Medical facilities	12
Interesting job	<u>6</u>
Total (N = 16)	100

Table 1.4. Distribution of Reasons for Job-Disliking (Our Kaduna Pretest)*

Reasons	Percent
Lack of mobility	31
Termination	13
Wages	13
Bad treatment	13
Hours of work	13
Pressure of work	6
Relations with management	6
None	<u>6</u>
Total (N = 16)	101

*Pretest from the Kaduna plant of Star Brewery, Ltd. The pretest consisted of 16 workers randomly selected from pay vouchers. The total work force was 258, thus the pretest sample accounts for 6.2% of the total working population in the plant. Since this is a pretest using a relatively small sample, it is hard to make significant inferences to the total population. Furthermore, we did not consider the question of "liking" or "disliking" strong



Finally, in response to the question, "What do you want your son to become?" Siebel found that over 70% chose professional occupations, less than 30% chose technical work and the rest chose clerical work or said it was their "children's own choice."¹ This finding can be used inferentially as the prestige ranking of different occupations by the industrial workers.

One significant finding of Siebel in connection with job satisfaction is that wages are critical. This seems to be corroborated by Evelyn M. Bell in her Polygons studies.² Bell argues that though Silcock and Hill, in their studies, did not find any correlation between wage, labor turnover and mobility, "among Polygons employees, however, there was oral evidence of considerable interest in wage."³ As evidence, she indicated that "an examination of the labour history of the men showed many examples of efforts to improve wage position and to move into higher

enough to measure the saliency of the reasons to the workers, so in our main study we changed it to reasons which the workers felt strong enough about to cause them to leave or stay in the factory. This, in our opinion, will not only measure reasons for liking or disliking, but also the saliency of the reasons.

¹Ibid., p. 93. These represent collapsed forms by us.

²Evelyn M. Bell, "Polygons Part Two: A Study of Labour Turnover," Occasional Paper No. 3, Dept. of African Studies, Salisbury, 1963, University of Rhodesia, Nyasaland.

³Ibid., p. 35.

earning occupations, and frequent expressions of dissatisfaction with wages in the jobs they held before enrolling with Polygons."¹

To account for some conditioning factors for labor turnover, Bell concludes (a view also supported by Elkan)² that "conditions within urban employment are as yet insufficiently attractive or secure to engender any real desire to resist the force of circumstances which eventually draw a man away from employment--the strong attachment to tribal homes, where ties of kinship, of custom, inheritance . . ."³ are so strong. Put in sociological terms, one would interpret this as the perceived downward status mobility of the worker by accepting industrial work. Thus the worker would tend to accept the criteria for status distribution in the traditional system instead of those of the industrial system and will therefore consider accepting industrial work as a downward movement or at best a means of acquiring higher status in the traditional system. Such a pattern was found among the Baganda by Elkan and Fallers.⁴ However, such might not be the case in Nigeria where, as Bispham points

¹Ibid., p. 35.

²W. Elkan, "The Persistence of Migrant Labour," Bulletin of Inter-African Labour Institute, September, 1951. See also W. Elkan and Lloyd A. Fallers, "The Mobility of Labor," in Moore and Feldman, op. cit., pp. 238-57.

³Bell, op. cit., p. 47.

⁴Elkan and Fallers, op. cit., p. 245.



out, "there is now a ready-made labour force fully willing to work in industrial conditions and . . . capable of doing so."¹ This also seriously questions Bell's assertion that "target workers are common in the labor scene in most parts of Africa where industrialization is developing alongside the existing rural pattern."²

Evelyn Bell in this study interviewed 585 African industrial workers between May and June, 1959, in a manufacturing factory nicknamed Polygons, in Salisbury, Southern Rhodesia. In terms of age distribution, the study found that the mean age was 28.27 years and the median age was 29. Seventy-six percent of the sample fell between 21-35 years while 51% fell between 26 and 35 years. It is interesting to note that Elkan and Fallers, deriving their distribution from A. W. Southall, found that "the average age of employees in Kampala [Uganda] in 1954 was about 26.5 years; those over 30 comprised only about one-fifth of the total labor force."³ In our pretest in the northern region of Nigeria we found that the mean age was 32.68 years and the median age was 28.33 years. The discrepancy between our pretest and study findings and earlier findings by

¹W. M. L. Bispham, "The Concept and Measurement of Labour Commitment and Its Relevance to Nigerian Development," Nigerian Journal of Economic and Social Studies, Vol. 6, No. 1, March, 1964, p. 55.

²Bell, op. cit., p. 35.

³Elkan and Fallers, op. cit., p. 246.



Siebel, Elkan and Fallers, and Bell will be fully discussed later in this dissertation.

5. Theoretical Linkage Between Reference Group and Worker Satisfaction, and General Hypothesis

The first part of this section will deal more specifically with the theoretical link between reference group and satisfaction. More fundamentally, the section will address itself to the question of what it is about reference group that induces a comparative or evaluative behavior. The theoretical contention is that such comparative or evaluative behavior implicates the actor ineluctably in certain attitudinal and behavioral action patterns. It thus sets both an upper and lower limit conditioning certain attitudes and behaviors.

The utilization of social theories implies that such theories may be confirmed or denied by evidence. Indeed, according to Professor Karl Popper,¹ what distinguishes a scientific theory from a metaphysical proposition is that the former can be falsified by evidence. That is, it is capable of being disproved. Metaphysical propositions are not of this nature. They are regarded rather as self-evident 'truths.' Popper argues that the state of scientific knowledge at any given time thus represents theories that have not yet been disproved or falsified by

¹Karl R. Popper, Logic of Scientific Discovery (New York: Harper & Row, 1964).



evidence. Theories are also prior to experiments to the extent that they condition the kinds of questions that are asked and also the experiment itself.¹ These properties of scientific theories should be taken into account in any scientific endeavor to the extent that research possesses the dual function of affirming or denying theories.

The Self and Reference Group

The significance of reference group for comparative or evaluative purposes derives from the conception of the self in the process of socialization in a symbolic environment. Process involves a dynamic relationship.

A brief overview of the literature reveals that the self-concept arises from the way the actor is regarded by his fellow actors or individuals. This was essentially the point William James made in his discussion of the social self.² Cooley's "looking-glass-self" again focuses on an actor's appearance to other persons, the judgment of these others on the actor's position, and a kind of self feeling such as adequacy or inadequacy that the actor derives from such a situation.³ To these, Herbert Mead added

¹Karl R. Popper, The Poverty of Historicism (New York: Harper & Row, 1964), p. 98.

²William James, Principles of Psychology (New York: Henry Holt & Co., 1890).

³Charles H. Cooley, Human Nature and the Social Order (Glencoe: The Free Press, 1922), revised ed.

the distinction between the "I" and the "Me." The "I," to Mead, represented the impulsive core tendencies of the actor, while the "Me" represented the incorporation of the "generalized other" within the actor.¹

More recently, a number of others have taken this point of view, with varying modifications, in the development of the self concept. Shibutani, for example, argues that once an individual is located within certain conventional categories such as age-group, sex, occupation, ethnic and social classes, organically based self conceptions arise through the actor's location and interaction within these categories.²

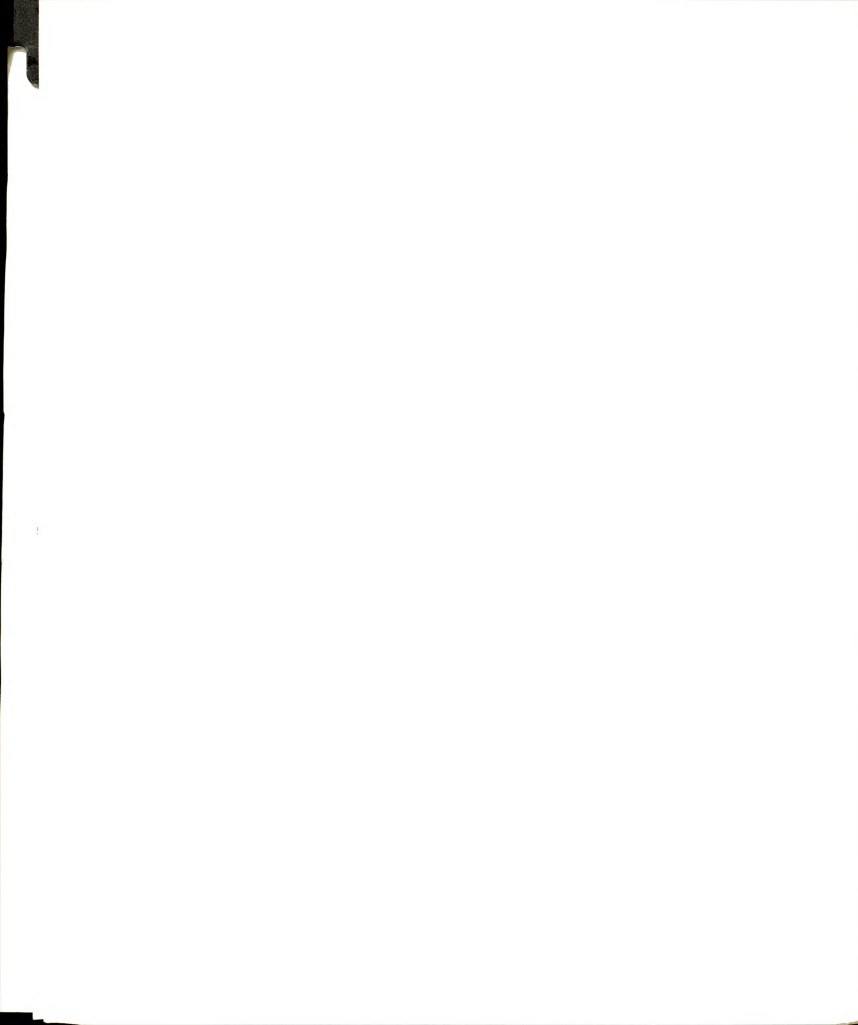
Though such a scanty overview of the literature does not do justice to the massive studies on self-conception, it nonetheless represents the general trend in such studies. The pattern that emerges from all these studies is that the conception of the self arises from the perception of how others view the position of the actor. Thus these others become the basis for self comparison and evaluation and self conception. It is not important to find out whether there is a correspondence between the actor's perception of how significant others view his position and the significant others' actual view of his position. The

¹George Herbert Mead, Mind, Self and Society (Chicago: University of Chicago Press, 1934).

²Shibutani, op. cit., pp. 214 ff.

critical factor is the actor's perception of significant others' perception of his position. Since, in Shibutani's terms, the actor is located within certain categories, these categories become the crucial conditioning factors for the actor's self conception. The perception by the actor of how these categories or generalized others (à la Mead) view his position represents one side of the coin. The other side represents how the actor perceives his position relative to the positions of these others and it is with this side of the coin that we are primarily concerned in this study. Thus, the actor in the development of the self, in a dynamic sense, constantly compares or evaluates his position to the positions of the others and thereby derives a self and, in Cooleman language, a sense of adequacy or inadequacy. In a symbolic environment, social functioning is predicated on this evaluation to the extent that without it there is no social self.

In this study, reference group is used as representing those others, the perception of whose attitudes, conditions the self conception of the industrial worker. Thus, in his self conception, if the industrial worker perceives that his own self is higher, equal or lower than those of his reference group, it will implicate him in certain attitudes and behavior patterns. In doing this, he will also be evaluating the social contexts that have conditioned his present self and there will be a general feeling of



adequacy or satisfaction, or inadequacy or dissatisfaction with these social contexts. A feeling of adequacy produces a positive self image to the extent that it corresponds to the perceived expectations of significant others, while a feeling of inadequacy produces a reverse effect.

Certain propositions derive from this position:

1. The self arises from a symbolic situation.
2. The self arises from the perception by the actor of the evaluation of others.
3. The self arises from the perception by the actor of his evaluation of others.
4. A feeling of adequacy or inadequacy is conditioned by the perception by the actor of others relative to himself.
5. This feeling is reflected on the social conditions that have produced such a feeling.

More specifically, the actor will feel adequate about himself and the general conditions that have produced this if he perceives that compared to others, he is on the whole better off. The reverse will also be true. In this study, adequacy and inadequacy are interpreted as satisfaction and dissatisfaction. Satisfaction is measured on a five-point scale of very satisfied, satisfied, not satisfied and not dissatisfied, dissatisfied, and very dissatisfied.¹

The general hypothesis for this study, therefore, is that: Satisfaction or dissatisfaction that an industrial

¹These are collapsed into satisfied-dissatisfied.



worker gets is related to his evaluation of how members of his reference group are doing vis-a-vis himself.¹

The major rationale for this hypothesis is that the industrial worker's self conception derives from just such comparison or evaluation with reference group members who are significant to his socialization. This, then, is the cardinal vector on which this whole study is based.

The significance of this study derives primarily from its use of reference group as a viable concept for the analysis of satisfaction or dissatisfaction of industrial workers. To the extent that social actors constantly make invidious comparisons between themselves and their reference group members in terms of their self maintenance, it is a crucial concept for analyzing satisfaction among industrial workers or other kinds of workers.

6. Arenas of Satisfaction

As indicated in the early part of this chapter, satisfaction is not a singular concept or a general attitude of well-being but rather applies to different arenas of economic and social activity. Thus a professor of sociology may be satisfied with the department of sociology in terms of his interaction with other professors in the

¹The specific hypotheses dealing with the different arenas of industrial activity are discussed in Chapter V in the analysis of data. Our reasoning in so doing is that such a pattern presents a more parsimonious way of looking at the data meaningfully.

department, with facilities for research, with his teaching load and so on. The same professor may be dissatisfied with the overall university administration, with disproportional recognition given to other departments and so on. The knowledge of one does not imply knowledge of the other and thus makes it difficult to predict the satisfaction with the university from the satisfaction with the department. Each should be treated as a singular social unit. However, how the social unit for analysis is established is a matter of research strategy and what it is the researcher wants to know.

In the analysis of the satisfaction of industrial workers, such social units or arenas include the sector, the occupation, the job, the work group, the company, and the factory. Economists divide the sector broadly into three categories--the primary or agricultural, the secondary or industrial, and the tertiary or service. Sociologists have taken over this tripartite classification from economics in their analysis of economic behavior.¹ Such a distinction is useful to economists because it permits them to isolate for analysis the "important differences between the general economic laws under which the three divisions operate."² For example, through such a

¹Miller and Form, op. cit., pp. 51-53.

²Colin Clark, The Conditions of Economic Progress (3rd edition, London: Macmillan, 1957), Chapter IX, "The Distribution of Labour Between Industries," pp. 490-508.

distinction economists are able to postulate the so-called Engel effect whereby proportionately smaller expenditures are made on agricultural products with increases in income while with increases in income proportionately large expenditures are made on manufactured goods. The distinction is also useful to sociologists to the extent that it provides a meaningful distinction in the patterns of socialization and the structural factors that condition the choice of one sector over and above other sectors. In this study, this tripartite distinction is maintained. Agriculture as used here and in the preceding chapters includes the related activities of farming, forestry, and fishing. Industry includes mining, manufacturing, utilities, construction; and service applies mainly to commerce and transportation, and also to banking, insurance and such related activities. In developing countries, the nature of the commercial or service sector is slightly different than it is in developed or industrialized societies. Commerce in developing societies comprises mainly trade at the intermediate level, most of which is retail trade or what is called, for lack of a better word, petty trade. Here the capital outlay varies considerably. In developing societies traders generally emerge from farm backgrounds and initially perform the task of the distribution of agricultural products. In this sense they precipitate the emergence of the peasant society which in Kroeber's terms links

the folk to the urban. Their work involves risks, endurance and commercial imagination.¹ Later, they begin to deal in manufactured goods which are imported. As incomes rise, profits accrue to the multiplicity of intermediary traders who benefit from the secular inflationary pressures.² As the economy advances traders quite often turn to industry, transport and estate agriculture. This also implies the accumulation of capital since these activities require larger capital outlays.

Besides sector status, there is also occupational status which defines the rewards and duties of an occupation vis-a-vis other occupations. Everett Hughes³ distinguishes between job-type and trade-type occupations. This distinction will not be maintained in this study and occupation will refer to both of them because of the inherent difficulty of transferability. Thus an electrician, a fitter, a welder, a driver mechanic or a plumber can be regarded as trade-types to the extent that these occupations are relatively easily transferable from one industry to another

¹P. T. Bauer, Economic Analysis and Policy in Underdeveloped Countries (London: Routledge & Kegan Paul, Ltd., 1966), pp. 67-72.

²A. N. Agarwala and S. P. Singh (eds.), The Economics of Underdevelopment (New York: Oxford University Press, 1963), p. 70.

³Everett C. Hughes, "Personality Types and the Division of Labor," American Journal of Sociology, Vol. 33, pp. 762-63.

whereas machine operators or hub-cap operators are not easily transferable to unrelated industries. However, since most of the so-called trade-type occupations are in the plants studied, primarily factory-based, such a distinction will not be particularly meaningful.

Work refers to the specific activity of the industrial worker in the plant together with the physical and social environment of work.

Major Variables

The primary dependent variables for analysis in this study, therefore, are:

1. Satisfaction with sector
2. Satisfaction with job/occupation
3. Satisfaction with work

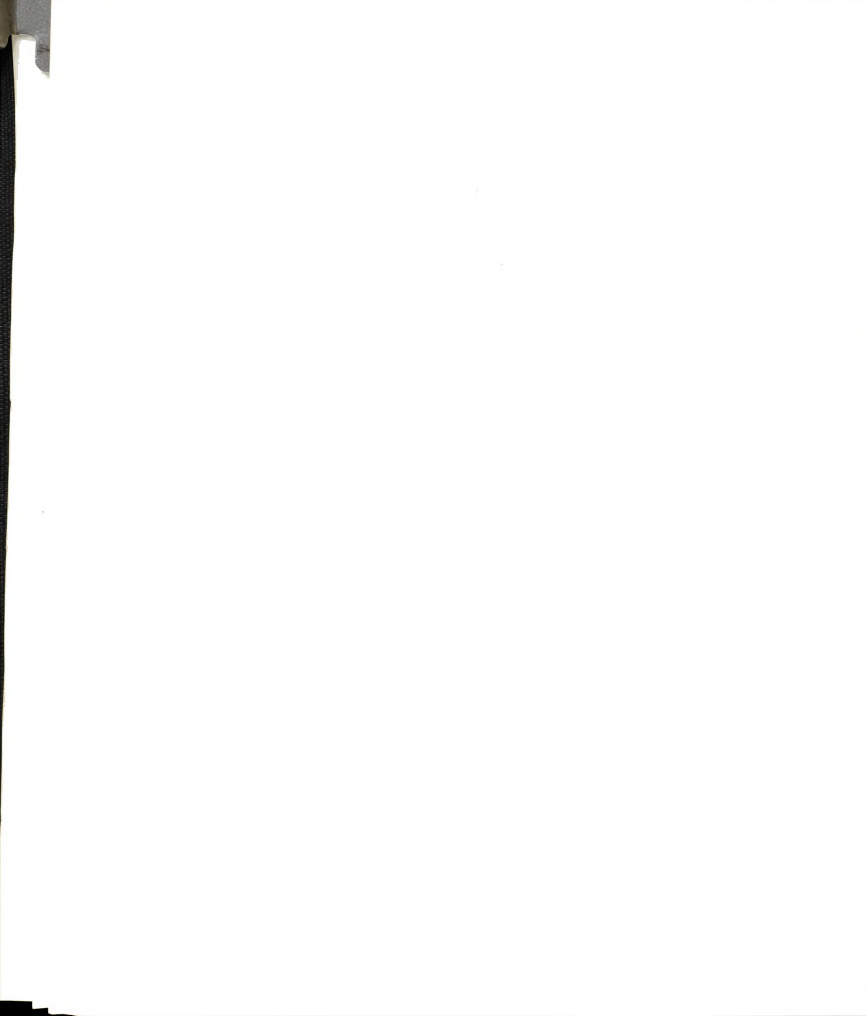
The major independent variables are:

1. Self-evaluation with reference group¹ members in other sectors
2. Self-evaluation with reference group members in other occupations
3. Self-evaluation with reference group members in other work environments

It is important to reiterate the point made earlier that satisfaction with one does not necessarily imply satisfaction with the others.

In addition to these independent variables others

¹For how this concept is defined see Chapter V.



such as age, education, income, urbanity, skill level and technology, father's occupation, and amount of help given to members of kinship group will be used to predict satisfaction. These are used primarily to confirm or refute other studies that have made them significant independent variables.

CHAPTER II

BRIEF BACKGROUND TO URBAN AND INDUSTRIAL DEVELOPMENT IN NIGERIA

Nigeria, which emerged as a unified country after the amalgamation of 1914, became independent from British colonial rule on October 1, 1960. By October 1, 1962, it was a Republic. Located between longitudes 3° E and 14° E, and latitudes 4° N and 14° N, Nigeria has a total land area of about 357 square miles, which is more than three times the size of the United Kingdom and slightly larger than Texas and Oklahoma put together. With an estimated population of 56 million,¹ it is the most populous country in the continent of Africa. The population density is therefore about 156 per square mile. This represents a density two and a half times the density of the United States, but much less than India (347 per square mile) or England and Wales (750 per square mile). However, Nigeria has a relatively high density in the continent of Africa.²

¹Federal Republic of Nigeria: Annual Abstracts of Statistics, 1964, Federal Office of Statistics, Lagos, p. 12.

²Egypt has a density of 62 per square mile; Ethiopia, 44 per sq. mile; Union of South Africa, 28 per sq. mile; Democratic Republic of the Congo, 13 per sq. mile; Sudan, 10 per sq. mile; Ghana, 52 per sq. mile. Source: The Demographic Yearbook of the United Nations, 1957.

Table 2.1. Summary of Population in Nigeria by Region*

Region	Population (millions)	Area Sq. Mi. (thousands)	Population Density
Northern Region	29.809	281.782	106
Eastern Region	12.394	29.584	420
Western Region	10.266	30.454	337
Mid-Western Region	2.536	14.922	170
Lagos Territory	<u>.665</u>	<u>.027</u>	<u>24,639</u>
Total	55.670	356.669	156

*Source: Federal Annual Abstract, Lagos, 1964.

Administratively and politically, Nigeria is divided into four regions and the Federal Capital of Lagos, each of which functions as a semi-autonomous unit. These four regions are: the North, East, West, and Mid-West. However, for the purposes of this study we will disregard these sections and treat all of them within the unified rubric of Nigeria.

The majority of Nigerians live in rural areas or villages but the 1952/53 census¹ indicates that about 19% of the population live in towns of 5,000 or more. Since the urban area is defined differently in different

¹The 1952/53 census will be used in this study except as otherwise indicated since it has more meaningful breakdowns and since the 1962 census has aroused certain suspicions and doubts.

countries,¹ there arises a difficulty of cross-national comparisons. However, using the United Nations Demographic Yearbook of 1952, it could be argued that Nigeria is among the low urbanized areas, lying somewhere between Korea (20%) and Jamaica (18%).² Davies believes, in any event, that city growth in Africa is proceeding more rapidly than anywhere else in the world.³ To the extent that urbanization involves not only numbers--the proportion of those living in urban areas in the total population--but also a whole new set of normative behavior and value orientation, it becomes even more difficult to have cross-national comparisons. These factors should be borne in mind while considering the process of urbanization in Nigeria.

It is estimated that urban population in Nigeria will increase by about 3% per year, which in actuality is higher than the estimated increase of the total population

¹The United States, for example, uses 2,500 as the demarcating line between rural and urban while India, Ceylon, Belgium and Greece place the line at 5,000. Still such countries as Italy, Sweden, Poland, Rumania, etc., do not make any numerical distinctions. Italy, for example, considers an urban area as a commune in which less than half of the employed persons are engaged in agriculture. In Canada, all cities, towns and villages are classified as urban if they are incorporated. These are just a few examples to show the difficulties of cross-national comparisons.

²U.N. Demographic Yearbook, 1952, Table B.

³Kingsley Davis, "Urbanization and the Development of Pre-Industrial Areas," Economic Development and Cultural Change, 3, October, 1954, pp. 20-21.

which is a little under 2%.¹ This estimated increase is, however, dependent on the rate of industrial growth and the relative attractiveness of urban-industrial living to the total population. In any event, if other things are equal and this growth rate continues, Nigeria will emerge as an urbanized country in three to four decades. This appears to be a very optimistic estimate and whether or not it can be realized will depend on time and the rate of industrialization.

Related to rural dwelling in Nigeria is the fact that agriculture accounts for about 75% of the total male labor force with only about 6% in craft and industrial work. Crafts here include traditional crafts like iron works, calabash carving, woodworks, etc., so that the actual percentage in industrial work is even smaller than the 6%. In addition to providing employment for over 75% of the total male labor force, agriculture also accounts for about 50% of the National Income of Nigeria and 85% of her total exports besides enabling her to feed her population. However, measured by the standards of mature industrialization, this represents a relatively low level of industrialization. The best estimates, though somewhat arbitrary, of mature industrial growth and the changing occupational structure, are given by Miller and Form who indicate that "the mature

¹Economic Survey of Nigeria, 1959, Federal Government Printer, Lagos, p. 13.

industrial economy may be arbitrarily defined as one in which a third or less of the labor force is engaged in agriculture and over half of the urban labor force is engaged in nonmanufacturing pursuits. . . . In mature industrial economies the majority of the urban population have typically been born in the cities and have learned to live in them."¹ Even though the nature of the nonmanufacturing was not clearly delineated at least to take account of petty trade which abounds in Nigeria, this arbitrary definition may be used fruitfully as a working hypothesis.

Table 2.2. Primary Occupations of Nigerians (Males)
1952-53 Census (Thousands)

	Agriculture, Forestry, Animal Husbandry, Fishing & Hunting	Crafts, Skilled, Semi- skilled workers engaged in pro- ducing articles	Traders and Em- ployees engaged in com- merce	All Govt. & Local Govt. & Profes- sional Workers	Others	Total
Lagos Township	4	11	21	16	32	84
Western Region	1,154	119	145	54	125	1,597
Northern Region	3,876	291	151	104	245	4,667
Eastern Region	1,306	75	148	50	142	1,721
Total	6,340	496	465	224	544	8,069

Source: Federal Republic of Nigeria, Annual Abstract of Statistics, Nigeria, 1964, Table 2.3, p. 13.

¹Miller and Form, op. cit., p. 39.

In contrast to the agricultural sector, the industrial sector, with which we are primarily concerned here, is relatively new. Even though one may agree in a general sense with Dr. Aboyade that "it would nevertheless be true to say that the economic development of Nigeria is not just a phenomenon of the Second World War,"¹ it may also be true in a specific sense that "it is only in the last ten years that industrialization on a factory scale has been gathering momentum."² Indeed the International Bank for Reconstruction and Development, in the report after its mission to Nigeria in 1954, indicated that "in less than ten years the economy has grown and strengthened to such an extent that it bears little resemblance to the prewar economy."³ In actuality, industrialization in Nigeria can be regarded as related to the changing circumstances and demands of the Second World War.

Even though tin was mined and exported for over 50 years, it was not until during the Second World War when Malayan tin supplies ran out that tin production in Nigeria

¹Ojetunji Aboyade, Foundations of an African Economy: A Study of Investment and Growth in Nigeria (N.Y.: Frederick A. Praeger, 1966), p. 1. Aboyade recognizes this with regard to the industrial sector; vide, p. 133.

²Economic Survey of Nigeria, 1959, p. 5. Also see Western Nigeria Development Plan, 1962-68, Government Printer, Ibadan, p. 25.

³Economic Development of Nigeria, Report of the I.B.R.D., Federal Government Printer, 1954, p. 6.

was stepped up.¹ After the war, production declined as columbite production rose and then fell. Limestone deposits have also, since 1958, made possible the production of cement which by 1962 figures accounts for about 30% of total consumption. Coal has also been mined in Nigeria for over 40 years and was a primary source of fuel even before the Second World War. However, with new sources of power being made available in Nigeria, it is estimated that total coal production will decline in future. Mining thus provided the initial introductions of Nigerians to the processes of industrialization, i.e., the patterns of industrial normative systems.

Processing and manufacturing industries are still more recent in Nigeria and contribute much less to the National Income. In the words of the 1959 Economic Survey, "industry is not yet a major contributor to Nigeria's National Income."² The number of persons working for industries employing ten or more persons is estimated at 40,000. The total number of all those employed in manufacturing in 1962 is given as 57,960 with the total number of establishments being 514.³ This total includes such items as meat products, dairy products, training, etc.

¹Economic Survey of Nigeria, 1959, p. 50.

²Ibid., p. 60.

³Annual Abstracts of Statistics, Nigeria, 1964, op. cit., Table 5.4, p. 41.

There are certain implications for our study resulting from all these. The obvious conclusion is that industrialization is a very recent development in Nigeria. If we take the period 1945-1950 as the beginning of active industrialization in Nigeria, with the mean age of 32 years that we obtained in our study, it follows that most of the workers were between the ages of 15-20 years by this time and would already have been socialized into traditional patterns of behavior before entering the labor market.

Further implications for labor commitment and work satisfaction are posed for our study. On the demand side of the labor market are the emergence of new opportunities which utilize labor for maximum production and profits. On the supply side are factors which motivate entry and participation in the labor market. Such factors include the kinds of rewards that are available which can induce greater responsiveness if by comparison they are perceived to be more satisfying than other alternatives or lack of alternatives. Some decision theorists make a distinction between optimal alternatives and satisfactory alternatives,¹

¹James G. March and Herbert A. Simon, Organizations, Graduate School of Industrial Administration, Carnegie Institute of Technology, 1959. They state, for example: "An alternative is optimal if: (1) there exists a set of criteria that permits all alternatives to be compared, and (2) the alternative in question is preferred by these criteria to all other alternatives. An alternative is satisfactory if: (1) there exists a set of criteria that describes minimally satisfactory alternatives, and (2) the alternative in question meets or exceeds all these criteria." p. 140.

but our concern here is not with such fine distinctions. Between the supply and demand factors are various intervening variables such as the conditions and the institutions that enhance entry. Such intervening institutional complexes may be in the traditional system or in the industrial system. It is here that the linkages between the traditional and the industrial can most fruitfully be investigated. What the economists call opportunity cost becomes very critical in inducing participative behavior in the industrial sector.

Another factor to note in this brief overview of industrialization in Nigeria is the relatively low per capita income. This is estimated to be about \$84 per annum.¹ By contrast, those employed in manufacturing received, through wages and salaries, about \$525 per annum.² This represents a disproportionately higher income for factory workers than for the whole nation.

Another important aspect of the process of industrialization in Nigeria, which has been touched upon briefly earlier, is the fact that manufacturing has not yet dominated the industrial sector nor even the economy. This is to be expected in the light of Miller and Form cited

¹Puis N. C. Okigbo, Nigerian National Accounts 1950-1957, Federal Ministry of Economic Development, Lagos, 1962, p. 9.

²Computed from Annual Abstracts of Statistics, Table 5.4, p. 41.

Table 2.3. Volume Index of Industrial Production (Base Year 1957 = 100) Analysis by Activities 1950-1961*

Activity Sectors	1950	51	52	53	54	55	56	57	58	59	60	61
<u>Manufacturing</u>												
Bakeries	9	16	23	29	31	77	87	100	91	113	137	138
Groundnut Oil												
Milling	17	8	13	12	17	21	109	100	102	123	120	117
Beer	16	19	28	38	44	61	77	100	147	173	218	261
Tobacco	66	63	81	92	105	98	110	100	98	98	107	105
Textiles	1	4	5	8	13	14	15	100	108	80	82	120
Soap	34	48	90	95	113	77	120	100	105	127	187	191
Rubber												
Processing	3	4	8	17	23	53	68	100	103	134	143	137
Training	15	15	39	55	43	67	61	100	88	103	103	107
Saw Milling	33	30	62	53	85	96	88	100	127	127	132	145
Metal Products	51	67	100	117	105	138	149	100	108	123	116	157
Cement	-	-	-	-	-	-	-	100	222	237	310	600
<u>Mining</u>												
Coal	72	68	71	86	78	92	97	100	135	91	69	73
Tin	87	90	87	86	83	86	95	100	64	57	79	80
Columbite	45	56	67	102	151	164	135	100	42	83	106	122
Oil (1958=100)	-	-	-	-	-	-	-	-	100	220	346	914
<u>Public Utilities</u>												
Electricity	41	42	51	59	63	75	85	100	116	124	151	228
<u>Construction</u>												
Building & Civil Eng.	47	59	45	60	88	89	85	100	95	112	149	163
<u>Summary</u>												
Manufacturing	29	29	44	48	59	66	93	100	117	130	136	157
Mining	81	82	83	88	83	93	98	100	82	88	113	174
Public Util.	41	42	51	59	63	75	85	100	116	124	151	228
Construction	47	59	45	60	88	89	85	100	95	112	149	163
Total	48	57	50	62	83	86	88	100	98	112	142	166

*Source: Aboyade, op. cit., p. 134.

above and in terms of the relative underdevelopment of industrial activities. Using Aboyade's computations, we observe that construction activities exert a strong influence on the whole industrial sector.

Using the volume index of industrial production, Aboyade concludes, with regard to the manufacturing industries:

The longer established manufacturing industries like tobacco, soap and saw milling also did not exhibit impressive growth. The more phenomenal increases were experienced in breweries, drinks, textiles, rubber processing and more especially in cement in 1957. Groundnut milling moved suddenly to a new height in 1956, but since then seemed to have grown slowly and with hesitation. . . . Apart from cement, metal products constitute the only existing capital good industry; but this certainly has not shown any remarkable or steady growth. As manufacturing industries covered in the table represent about 93 per cent of the value added by all manufacturing activity in the base year 1957, we may conclude that the manufacturing sector was still heavily concentrated on a very narrow range of consumer goods.¹

The relatively developing nature of the Nigerian economy becomes very apparent from this. Our study covers two metal processing industries, one soft drink bottling factory and one canning factory. These four factories constitute three levels of growth. Soft drinks represent high growth, metal processing middling growth and canning represents low or undiscernible growth.

One can safely state, in the light of the discussion

¹Aboyade, op. cit., p. 135 (emphasis mine).

above, that the Nigerian economy is in the very early stages of industrial development. This, coupled with the demonstration effect of mature industrialized societies, might have prompted the Federal Government of Nigeria in its Six Year Development Plan 1962-1968¹ to regard industrial development as one of the prime priorities. Indeed in the regional version of the national plan, the Western Regional Government states that "industrial development in Western Nigeria is in its early stage. . . . The industrialization concept is not one of creating this or that industry; rather, it is an economic process in which industrialists become interested primarily in meeting domestic needs for manufactured goods and . . . steadily acquire the necessary managerial and technical skill and entrepreneurial ability for developing more complex large-scale and small-scale industries."² This trend is reflected in the other regions.

The emphasis on "managerial and technical skill and entrepreneurial ability" is crucial because the top levels of the industrial hierarchy are saturated with expatriates. Onyemelukwe complains that " . . . there has been an increasing dependence on technical manpower from abroad both in government service and in private industry.

¹National Development Plan 1962-1968, Federal Government of Nigeria, 1963.

²Western Nigeria Development Plan 1962-1968, Government Printer, Ibadan, p. 25.



The persons so recruited are often second-rate but have been paid high wages."¹ While the shortage of skilled technical manpower is noted by many, Dr. Azikiwe declared in his Foundation Day speech in 1961 that: "There is no need for us to be running helter-skelter abroad begging for experts to come and guide us when we have indigenous experts galore in Nigeria."² However, the manpower level in 1960 and the projections into 2000 A.D. together with employment figures in different occupational groups will give a fairly clearer picture of the critical manpower shortage. This will also give us a distribution of the skill levels.

Table 2.4. Projected Manpower Needs of Nigeria

Year	A. Total Popula- tion in millions	B. Working Popu. 51% of A	High level manpower 1% of B	Intermed. level manpower 5% of B	Skilled manpower 25% of B	Semi- skilled and un- skilled manpower 69% of B
1960	41.0	20.9	0.2	1.0	5.0	14.7
1970	52.3	26.8	0.3	1.3	6.7	18.5
1980	68.0	34.6	0.4	1.7	8.7	23.8
1990	88.4	45.1	0.5	2.3	11.3	31.0
2000	116.9	60.6	0.6	3.0	15.2	41.8

Source: Onyemelukwe, op. cit., p. 285.

¹C. C. Onyemelukwe, Problems of Industrial Planning and Management in Nigeria (London: Longmans Green & Co., Ltd., 1966), p. 287. Also see Daily Times (Nigeria), March, 1965, July 24 and July 26, 1965, articles by Adisa Adeleye.

²Quoted from Eric Ashby, African Universities and Western Tradition (Oxford University Press, 1964), p. 51.

Table 2.5. Reported Employment by Major Occupational Groups by Industry Division:
December, 1962

Occupational Groups	Employment by Industry Division								
	Agricul- ture, Forestry and Fishing	Mining and quarry- ing	Manufac- turing	Construc- tion	Elec- tricity, water & sanitary services	Com- merce	Transport storage and com- munica- tions	Serv- ices	
TOTAL	518,805	31,308	47,817	53,125	100,793	16,545	38,925	49,831	180,461
Professional and Technical:									
Nigerians	12,599	208	153	698	304	137	354	349	10,396
Non-Nigerians	6,201	129	504	481	793	140	302	219	3,633
Administrative executive and managerial:									
Nigerians	10,193	166	108	588	362	36	1,079	868	6,986
Non-Nigerians	3,800	71	198	548	285	61	1,332	401	904
Minor Professional and Technical	74,678	2,898	502	2,583	2,295	1,237	693	3,728	60,742
Clerical workers	54,302	1,040	952	4,502	3,214	1,896	11,012	7,767	23,919
Sales workers	5,687	31	16	1,099	64	4	3,849	205	422
Farmers, fishermen, and loggers (in- cluding laborers)	21,719	13,049	95	592	737	98	761	20	6,367
Miners & quarrymen (includ. laborers)	36,221	220	33,803	393	795	77	109	367	457
Transport & commu- nication workers	39,341	847	1,610	3,004	9,528	771	2,415	15,154	6,012
Craftsmen	25,135	431	819	4,624	12,877	1,566	1,573	1,349	1,896
Trade apprentices	8,072	416	172	2,222	1,016	107	578	855	2,706

Artisans & production process workers	42,424	1,519	2,164	14,325	12,069	2,977	2,404	3,178	3,788
General unskilled laborers	150,149	9,879	6,386	16,017	54,786	7,267	11,024	14,504	30,286
Services, sport & recreation workers	28,284	404	338	1,449	1,668	171	1,440	867	21,947

Source: Annual Abstract of Statistics, Nigeria, 1964, Federal Office of Statistics, Lagos, Nigeria, April, 1965.

Industrial classification generally conforms to the United Nations Standard Industrial Classification. Occupational Classification departs from the International Standard Classification of Occupations in several ways: (a) minor professional and technical workers are defined as persons without full professional qualification performing minor professional or technical tasks, usually under supervision, (b) craftsmen, trade apprentices and artisans and production process workers are each separately distinguished. Craftsmen are workers who have undergone a standard period of training and possess apprenticeship certificates. Trade apprentices are workers who have entered into contracts, articles or indentures of apprenticeship covering a specific period and who are receiving systematic training in a recognized trade. Artisans and production process workers are workers who have normally received some training as apprentices or in-service trainees but who do not possess the apprenticeship certificates, (c) general unskilled laborers are distinguished as workers without previous experience or training (except those in farming or mining).

Even though the working population of the expatriates is not fully given by the 1962 census figures, we can find from Table 2.5 that over 10,000 of the non-Nigerians are in professional, technical, administrative, executive and managerial. This is out of a total non-Nigerian population of about 41,000.¹ This accounts for about 25%. By comparison, Nigerians in these groups, even when computed by employment in major occupational groups which is much smaller than the total population, gives only a paltry 4.52%. This particular trend is borne out by our study where, except for the canning factory which is owned by the Western Nigeria Development Corporation, the top managerial and technical positions are held by expatriates. The crux of the matter, however, is that since the bulk of the capital in this area is owned by the expatriates and skilled manpower is short,² in order to protect the investment and its profitability, these expatriates find it convenient to supply their own skilled personnel. A way out of the impasse is through increased technical and managerial training and it appears that both the National

¹Annual Abstract of Statistics, op. cit., Table 2.5.

²Aboyade, op. cit. Aboyade indicates that "A number of important industries are dominated by single firms which are either international oligopolies or vertically integrated with such business organizations." p. 132. He gives such examples as cigarettes and tobacco, petroleum, breweries and drinks, soap and toiletries, aluminum products and building materials like metal windows and tiles. To this list, however, can be added metal construction.



Plan and the Regional Plans seem to have finally recognized this need.¹ The dominance of the higher skill levels by expatriates, however, is not peculiar to Nigeria but is rather a characteristic of most developing countries.

The general characteristics discussed so far lead us to the obvious conclusion that Nigeria is an underdeveloped economy or at best a developing one. Aboyade also reached the same conclusions when he stated: "But probably more significant was the simple fact that at Independence (1960) Nigeria was still squarely an underdeveloped economy."²

¹The Federal Plan increased its expenditure on education from 14.6 in the 1955-61 plan to 37.3 in the 1962-68 plan.

²Aboyade, op. cit., p. 26. For a more detailed analysis of the characteristics of the Nigerian economy and its growth patterns, see Aboyade, op. cit. This is the best single comprehensive survey and analysis so far.

CHAPTER III

A SUMMARY DESCRIPTION OF THE FOUR PLANTS STUDIED

Introduction

The study was conducted between August, 1964, and July, 1965. Actual interviews began from April, 1965, until July, 1965. Two of the factories--Metal Containers and Metal Construction--are located in the federal capital, Lagos, and the other two--Coca Cola Bottling and Fruit Canning--are located in the regional capital of the West at Ibadan. In addition, a pretest was conducted at a beer bottling factory in the regional capital of the North, at Kaduna. A total of 142 workers were interviewed in the main study while the pretest used 16 workers. An interview guide was used. Originally a questionnaire was the planned instrument but it soon became apparent that the workers, unfamiliar as they are with such techniques and language, would have a great difficulty in filling in the answers by themselves. Consequently, the original questionnaire was used as an interview guide with the researcher filling in the responses. Most of the questions were fixed alternatives but a few open-ended questions were also used. In addition, observations and off-the-job conversations were recorded in the traditional anthropological style. These will later be built into the main corpus of the analysis.

The factories were not randomly selected due to the vagaries that accompany research and access in such areas. These factories therefore represent those that granted permission for the study. Opposition to research in industry is not unique to Nigeria. Form experienced similar difficulties in gaining access to the Oldsmobile Plant in the United States.¹ However, if the characteristics of a labor force are to be accurately described and known for purposes of research and decision-making, industries should be convinced to grant access to legitimate researchers with relative ease.

Apart from the canning factory where research constraints did not permit the interview of a larger sample, all other workers were selected randomly. Furthermore, except in canning and bottling where the sample included white-collar workers, the other samples were restricted to blue-collar workers. The total sample of 141 represents about .3% of all those engaged in manufacturing in Nigeria. Even though this is not a random sample, we can still make certain limited inferences to the industrial population. However, it is our hunch that such inference may not be too far wrong. In contrast to the selection of the factories, the industrial workers in the plants were randomly

¹William H. Form, "A Bargaining Model of Social Research," unpublished manuscript, Michigan State University. We are indebted to Professor Form for permitting us to use this material even though it is only for private circulation.

selected. In addition, the records of the Lagos factories dealing with labor turnover were used to determine the turnover rate. These records also include the reasons for leaving or termination and these, it is hoped, will give some clues as to adaptation and commitment of industrial work.

Finally, it should be pointed out that all interviews were done by the researcher and no attempt was made to train interviewers. This makes for consistency in interviewing patterns as it made sure that all the questions were asked in the same manner. The interview time ranged from 25 minutes to 2 hours, 30 minutes, with the mean as 1 hour. To minimize the tensions created by the interview situation, the researcher offered cigarettes to those workers who smoked and soft drinks or tea or coffee to those who did not smoke. This, in our opinion, tended to ease the context of the interview. At the end of the interview, if there were certain inconsistencies in dates, ages, etc., the respondents were faced with such inconsistencies and in many cases this proved to be helpful as it aided recall patterns.

The following represent summary descriptions of the four factories that were studied.

1. Metal Containers Factory, Lagos

Legally established in Nigeria in January, 1940, it represents a branch of a larger private Dutch company--the Van Leer Group, which had 49 factories in other parts

of the world until the Nasser government in Egypt nationalized one of its factories. Starting production in the early 1940's, it was mostly concerned with the production of bitumen drums mainly for containing coal tar. A few years later, a new plant was established to recondition and repair old drums. This was necessitated by the shortages created by the Second World War. The reconditioning plant needed gas, particularly oxygen and acetylene, and so the company decided, by the end of the war, to produce its own gas. Gas production, however, became so lucrative that around 1959, it became established as a separate company with its own management and policies.

The container factory then settled down to the production of 44 imperial or 55 American gallon drums. A few years later, it added the production of four imperial gallon kerosene tins. By 1961 it began the production of dust bins of 10, 8, 5 and 2 imperial gallons, and also head pans. These then constitute the main products of the factory.

The factory does not have a separate sales section as it produces mainly on order from the big petroleum companies like Esso, Texaco, Shell, B.P., Total, Agip, Mobil and Shell-B.P. There are also small private consumers whose market is handled by a few middle-men.

Metal Containers has a small sub-station at Port Harcourt in the Eastern Region but the bulk of its labor force is located in its Lagos plant. At the time of research,



the Lagos plant employed a total of 237 workers.

Table 3.1. Distribution of Metal Containers Workers by Mode of Income and Country of Origin

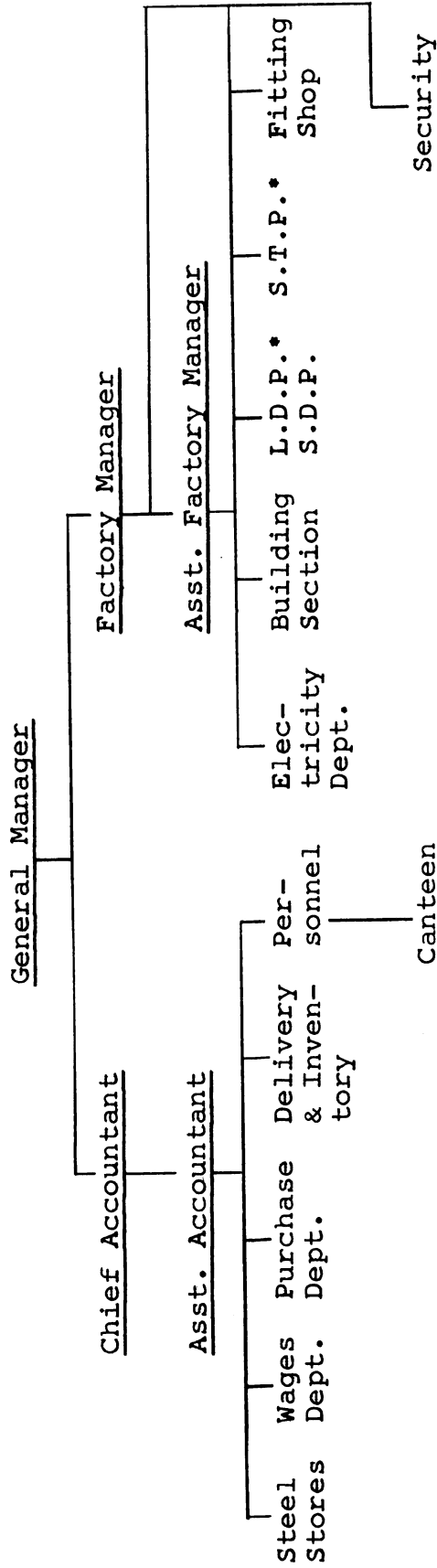
Nigerian daily rated wage earners	170
Nigerian monthly rated salary staff*	55
European staff.	<u>12</u>
Total	237

*Of the total African salaried staff only two held managerial positions--Foreman L.D.P. and the Establishment Officer who died in May, 1965, shortly before this research began in the plant.

From the total Nigerian labor force of 225, a random sample of 63 workers, representing 29%, was drawn. Since white collar workers constitute about 66% of the monthly rated salary staff, our sample represents about 34% of the total blue collar workers with whom we are primarily concerned in this study. The random sample was drawn by using a table of random numbers to the list of all blue collar workers provided by the management. In actuality, the original sample contained 64 workers but one was dropped because of serious language difficulties.

The factory is broadly divided into two main sections, one under the chief accountant and the other under the factory manager. The factory manager is in charge of production while the chief accountant controls stores, wages, purchases, personnel, and delivery and inventory.

THE ORGANIZATION CHART: METAL CONTAINERS



*S.T.P. = Square Tin Plant
 S.D.P. = Small Drum Plant
 L.D.P. = Large Drum Plant

Note: These three sections and the Fitting Shop are headed by foremen but only one of them, foreman L.D.P., holds a managerial position. All the foremen are also headed by European "engineers."

Chart 3.1. Organizational Chart of Metal Containers of Nigeria

Above these two is the General Manager. The Establishment Officer was under the Factory Manager to the extent that most of the workers are in production and also under the Chief Accountant since he controls personnel.

The main production section, therefore, is divided into three main sub-sections--Large and Small Drum Plant, Square Tin Plant, and Fitting Shop. The L.D.P./S.D.P. section produces large and small petrol drums and dust bins. The square tin plant produces mainly kerosene tins and also head pans, while the fitting shop, comprising in the main skilled workers--fitters, welders and sheet-metal workers, is primarily concerned with machine repairs and also setting up the machines for production. Our study mainly concerned these three sections.

Of these three sections, the S.T.P. is the most automated, with the workers mainly performing machine-tending jobs. As a result of the flow of work, each worker's performance is dependent upon the workers on the earlier stages of production. This is critical because the company has an incentive policy where if production exceeded 1,800 tins, the workers were paid a bonus on every additional tin produced. Since this is the most demanded product of the factory, the pace of work is much higher than in the L.D.P./S.D.P. section where quantity is not as great and where there are slack periods. The company does not have much overtime work and so production starts

at 7 a.m. and ends at 4 p.m., with intermittent breaks for the workers. In fact, the company does not have any policy on break periods but merely states in its booklet on Conditions of Service:

"The normal working hours per week of six days are:

- A) Daily-rated workers ----- 44 hours
- B) Daily and monthly rated tradesmen,
foremen and drivers ----- 44 hours
- C) Security personnel ----- 48 hours
- D) Clerical staff ----- 39 hours."¹

The Fitting Shop workers are the least machine paced.

Indeed, they control the machines and their pace of work except when there is a machine breakdown and repairs are needed urgently. This section includes two apprentices.

The company provides "free medical attention for its employees in a clinic conducted by the Company's Nurse and the Company's Doctor."² But conditions of service add immediately that "the medical services to be rendered do not include surgical, dental, V.D. or eye treatment. The cost of medicines will be for the account of the employee."³ In all, the general conditions of service in this factory appear to be much better than those provided in Metal

¹Metal Containers of West Africa, Ltd.: Conditions of Service, January, 1963 (no publisher).

²Ibid., p. 5.

³Ibid., p. 5.

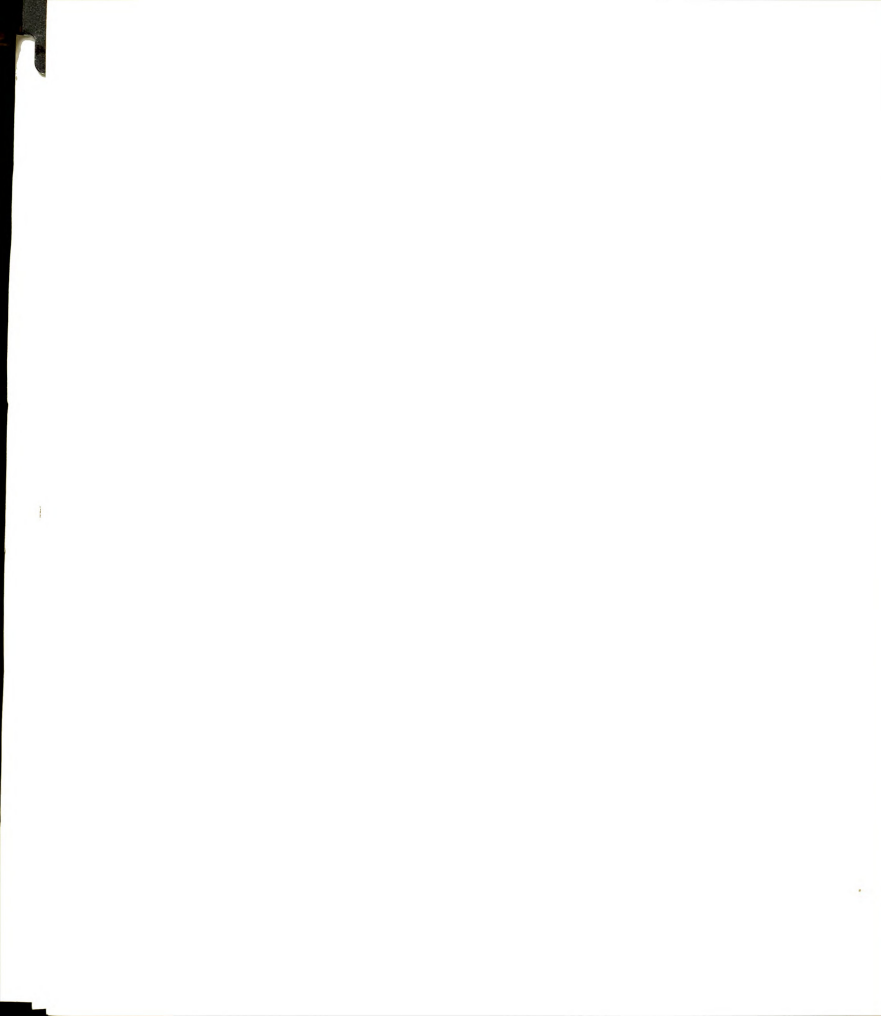
Construction or in Nigerian Bottling Company.

This factory has the lowest turnover rate, particularly considering the fact that it is the oldest of the four factories. Out of a total of 74 monthly rated workers employed between 1940-1965 only 19 have left the factory, while of a total of 195 daily-rated workers employed for the same period only 25 have left.

Table 3.2. Distribution of Reasons for Leaving Among Metal Containers Workers

	Dismissed	Resigned	Died	Not Seen	Invalidated	Total	(N)
Salaried	37%	42%	11%	11%	-	100	(19)
Wages	68%	24%	4%	-	1%	100	(25)
Total	55%	32%	7%	5%	1%	100	(44)

Thus, out of a total Nigerian labor force of 269 in this factory from 1940-1965, only 44 have left for various reasons. As can be seen above, dismissals account for almost four-tenths among salaried workers as opposed to seven-tenths for wage earners. Resignations account for 42% of salaried workers while they account for 24% of wage earners. The relative ease with which daily paid wage earners can be dismissed accounts for persistent verbal complaints of workers in this factory for not being "staffed." To be "staffed" meant to be paid monthly on a salary. Some of them even indicated that they would accept a salary cut to be "staffed." The turnover rate

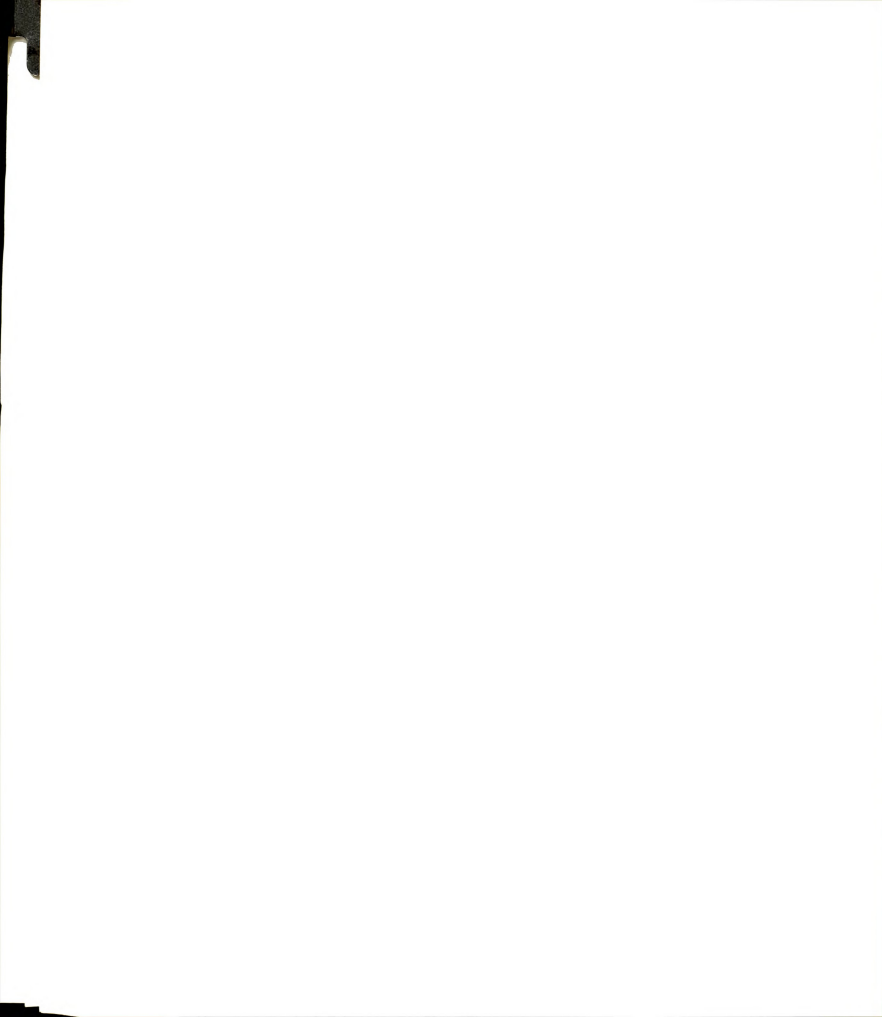


for this factory comes out at about 16%.

Finally, this is also the only factory that has an organized football team which is actively supported and encouraged by the management, and it also provides a meaningful avenue of mobility within the factory. The captain of the team quickly rose from laborer in 1957 to machine operator in 1957 to assistant foreman-in-training in 1962 and finally to assistant foreman in 1965. This worker agreed, when asked, that his participation in the football team has contributed to his rapid rise from the ranks.

A few comments will be in place here about the plant labor union. The local union called the Amalgamated African Staff, Clerical and Technical Workers of Metal Containers, West Africa (hereafter called the Factory Union), consists of all the Nigerian workers in this plant except two who have managerial positions and one who is being considered for a managerial position. Thus the strength of the union is about 222. Every year, after the union's statement of account has been filed with the Federal Register of Trade Unions, elections are held. In actuality, these yearly elections are not always held. For example, there were no elections held between 1961-1963.

The Factory Union consists of general members of floor members and an executive council. The floor members are all members of the union who are not in the executive council. The executive council comprises the President,



Vice-President, General Secretary, Treasurer, Financial Secretary and ten unofficial executive members chosen from the various sections. In 1965, all the top executive positions, excluding the unofficial members, were held by white-collar workers. The union was well organized structurally and records were painstakingly kept even though the factory workers showed great apathy in attending meetings. The records showed that the mean attendance was much less than 40% and some meetings were called off because of very poor attendance. The poor attendance can be explained by the timing of the meetings. General meetings were usually held on Saturdays when the blue-collar workers work until 11 a.m., while the white-collar workers stay on until 12 noon. Many of the blue-collar workers complained of having to wait a whole hour after their work for such meetings and most of them leave before the meetings start. While this research was going on, the Union was negotiating with management to let the white-collar workers off at 11 a.m. or at 11:30 a.m. on days of general meetings. General meetings and executive meetings are held once every month, the executive meetings coming shortly before the general meetings.

The Factory Union is affiliated with a national trade union--the United Labour Congress, and sends five delegates to the Lagos branch of the mother union. In addition to this linkage, the mother union is also

represented by a professional trade unionist who acts as a visiting secretary-general to the Factory Union which pays him a salary. The professional unionist may have five or more other unions to which he serves as visiting secretary-general and by such an arrangement can draw a very large salary. The factory unions need him because of the supposed political pressure he can bring on management in negotiations. Such pressures still have to be demonstrated and many factory unions have to fight their own battles. Indeed many factory union members accuse such professionals of double-dealing by receiving bribes from management and pedalling slow. A case in point will be demonstrated in the union of the next factory--Metal Construction. However, a comment by the President of the Metal Containers Union is particularly relevant here in terms of the relationship of the local union to the mother union.

You know that our trade union movement in Nigeria is very much split and most of us, in fact all of the trade unions, the big national ones are all financed by outside sources, and you see, this creates grave problems. You see, because the national trade union bodies have financial assistance from outside sources, they, I mean the trade union leaders, don't care for the local unions very much because whether we support them or withdraw our support, they still get money from abroad. This makes them not to worry too much about how the local unions function, whether they are contributing money or whether the workers are in fact well treated are not their concern. They don't, sort of, owe any allegiance to us, the local unions, and there is not much we can do to punish or check them because if we say we wouldn't contribute money they don't care and it is not a problem to them because they get money from outside. On the other hand,



we need them very badly particularly in serious situations when we are negotiating with management and need some influence to back us up. Take people like _____ or _____ or any of the big people in trade union business, if you have them as your paid secretary the management itself will know and sit up but where can we find them? In fact, once we tried to get _____ but his fee was too high. We didn't mind that but he never had time. All you hear is that he is in America, in Europe, everywhere, and somebody like him and in fact most of them don't care because whatever happens they get money. This is worrying us a great deal at the local union level because we need these people and they are never available and even if you can get them as paid secretaries they don't have time to attend meetings. This is too bad and you see most of us end up fighting for ourselves without their help.¹

These then in brief represent the work setting of the Metal Containers Factory. As a closing note, it should be pointed out that this is the only factory of its kind in Nigeria and so there is no competition in its product market.

2. Metal Construction Company, Lagos

This factory was started in 1958 by Mr. Santoro, an Italian, who also owns the Santoro Workshop in Italy. It was the second factory of this type in Nigeria after the establishment of Dorman Long which was the first. Soon after its inception Mr. Santoro became very sick and died in Italy in 1959. Mrs. Santoro took over as Managing Director with Mr. Santoro's nephew, Mr. Bizzaro, as the General Manager. From 1960-1962 Mrs. Santoro worked as the

¹From my field notes MCF No. 4.

Managing Director, but her health became so bad that she finally left for Italy, leaving Mr. Bizzaro as Managing Director and Mr. Migliore as the General Manager. At this point a bitter quarrel ensued and Mr. Bizzaro broke away in March, 1964, to establish his own Structural Steel Works, which he finally succeeded in doing by the end of 1964. Between the end of 1964 and the early part of 1965 Mr. Bizzaro succeeded in recruiting a considerable portion of the work force from the Metal Construction Company which in part accounts for the large turnover in this plant. Of a total work force of 215 employed in the Metal Construction between 1958 and 1965, 83 left by dismissal or resignation. This accounts for a turnover of about 39% between 1958 and 1965 as compared to 16% for the Metal Containers between 1940 and 1963. However, this high turnover in the Metal Construction is a little deceptive since a large proportion of those who left actually broke away with Mr. Bizzaro to his new plant.

The blue-collar labor force consists of 215 workers, out of which our study took a random sample of 45 workers which accounts for about 21% of the blue-collar workers.

The Metal Construction factory produces mainly large gasoline (petrol) tanks, and builds motor bodies with steel structures. Since there are about ten such factories competing for the product market, this factory

faces tough competition. The General Manager of the company complained to the researcher that the factory's profit margin was below 10%. "We are not making any profit at all because of bad competition--very cut-throat competition. You know that the owner of Pressed Metal was a former manager here and he broke away and established his business before the nephew of Mr. Santoro left us. Now we have nine companies producing the same products with us and most of them are very unscrupulous."¹ The General Manager indicated that the factory controls about 60% of the product market. However, the chief accountant had a lower estimate. He estimated that the factory controls about 20% of the product market. On the other hand, our own estimates put the figure at around 3%-7%. Our estimates were arrived at by computing the value of total turnover of Metal Construction for 1964-65 which was about £282,000 or about \$789,600. The total value of Iron and Steel products in 1963 was £8.81 million or about \$24 million.² Even allowing for no increase between 1963 and 1965 we obtain about 3.3% of the product market. However, this figure may reach about 7% if we exclude steel products other than those in construction. This figure seems realistic because even assuming that each of the ten factories has

¹Field notes MCC No. 1.

²Review of External Trade, Nigeria, 1963, Federal Office of Statistics, Lagos.

an equal share of the product market, each factory will control about 10% of the market. But Metal Construction has never had a government contract, a substantial consumer, while some of the others do. In fact, a new factory--Jammal Steel Structures, producing the same products, was formerly opened on July 15, 1965, by the most powerful political figure in Nigeria, the Sardauna of Sokoto--the Premier of the Northern region, and the president of the Northern Peoples Congress, the senior partner in the Federal Coalition Government.¹ In any event, Metal Construction was fairly profitable because in 1964/65 it showed a net profit (before taxes) of £58,000 or \$162,000, even though this represented a small drop from 1963/64 profits. The tax for 1963/64 was £1,800 or \$5,040, and assuming no substantial change in the tax structure, we can still get a profit of about £56,200 or \$156,960 which is not particularly discouraging.

The factory has no clear-cut policies with regard to conditions of service and except for one foreman (the only Nigerian) all the blue-collar workers were daily-paid workers. There are no medical facilities provided for the workers as in Metal Containers and a number of the workers complained about this. A comment by one of the workers, shared by most of the others, sums up this point very well:

¹See Daily Times (of Nigeria), July 15, 1965, p. 14, and July 27, 1965, pp. 7-9.

This is a very dangerous work. Do you know that we go inside those petrol tankers after both sides have been closed and stay there for two, three hours welding with all the fume and heat? In fact, when a worker comes out from working inside a tanker he is completely soaked out. His skin becomes extra soft and mouldy from excessive sweat and there is no help from management either by putting in a fan or somehow cooling the rotten place. No, nothing is done, and you know our African sun, and we work inside those tankers under such excessive heat. The rods and heavy iron we use have wounded several people and there is not even a small clinic or an emergency kit to protect workers. Nothing, I am telling you. Nothing. In fact, the worst part is when you get seriously injured and the company even refuses to use its van to take you to hospital. This is terrible and our lives are in grave danger. Again, when you are sick and you want to go to hospital, and that is another problem and in fact our problems have increased since the new Labor and Staff Manager came. You can't get paper to go to hospital when you are sick and even if you are given paper to go to hospital if you don't return by 12 noon they mark zero hours for you that day and you know our hospitals in Nigeria, you can stay there for almost a whole day without anybody attending to you. And now to worsen the whole situation, we don't get any increment at all. Imagine someone working three, four years without any hope of increment. There is no future you can look up to except the little money you can get from overtime.¹

The factory has a long history of many wildcat sit-in strikes which are the most effective weapons the workers use. At the time of research, the local plant union has filed an application but has not yet been registered by the federal registrar of trade unions. This union, unlike

¹Field notes MCC, No. 6. The significance of this can be seen in Chapter V, where this pattern produced a disproportionate amount of work dissatisfaction among Metal Construction workers.

the union in Metal Containers, is seeking affiliation with the most militant of the national trade unions--the Nigerian Trade Union Congress. The factory uses a lot of overtime to keep the heavy machines in full capacity but overtime depends on the willing consent of workers. The union very often exercises this freedom to refuse to work overtime, to the utter dismay of management. During the period of the research in this factory which lasted for about two months, there were eight such sit-in strikes which works up to about one sit-in strike every week. Again, unlike the Metal Containers, all members of the union in Metal Construction are blue-collar workers with a fire-brand militant president. There were occasions during this research when he almost got into fist-fights with the General Manager. A quick glance at the minutes of the general meetings of the two unions--Metal Construction and Metal Containers--will indicate the radicalism of the construction union and the relative conservatism of the containers union, and the massification of the construction union centered around the charismatic president and the bureaucratization of the containers union. A comparison of these two unions will be presented in a forthcoming article.

Out of a management staff of nine there are two Nigerians--the Accountant and the Labor and Staff Manager who was brought back from retirement in another company. Of all the blue-collar workers only the foreman is on

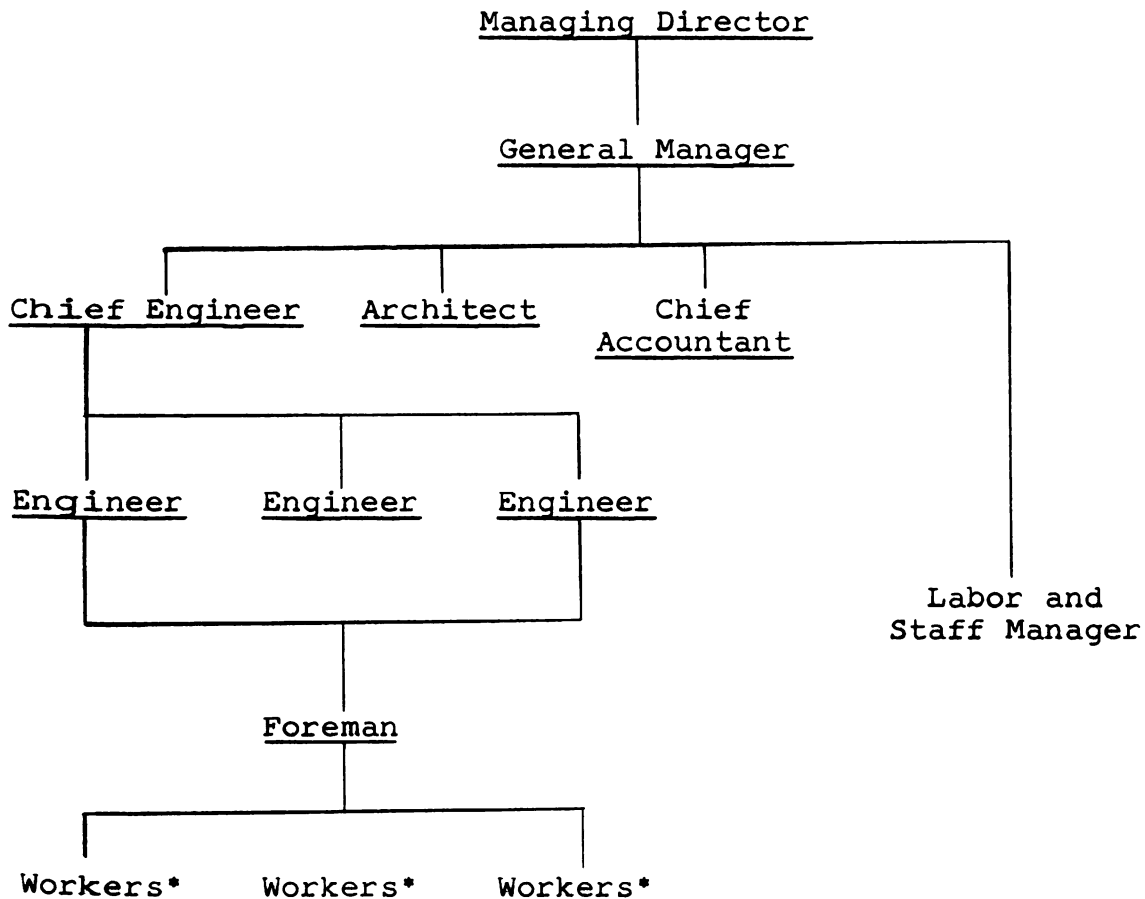
salary, all the others receiving daily wages. Of the seven European staff, all of whom are on management level, four are Italians, two are Scottish and one German. The Managing Director, the General Manager and two out of four engineers are Italian; the Chief Engineer and the Architect are Scottish and one engineer is German. This is a familiar pattern in the industries studied. In Metal Containers, all European staff except the nurse, are Dutch and in the Coca Cola Bottling Company in Ibadan all the European staff are Greek. This pattern is also repeated in the Star Beer Brewery in Kaduna.

Table 3.3. Distribution of Modes of Leaving Metal Construction Factory (Blue-Collar)

	Dismissed	Resigned	Died	Not Seen	Total
	38	40		5	83
Total	45.8	48.1	0.0	6.1	100.0

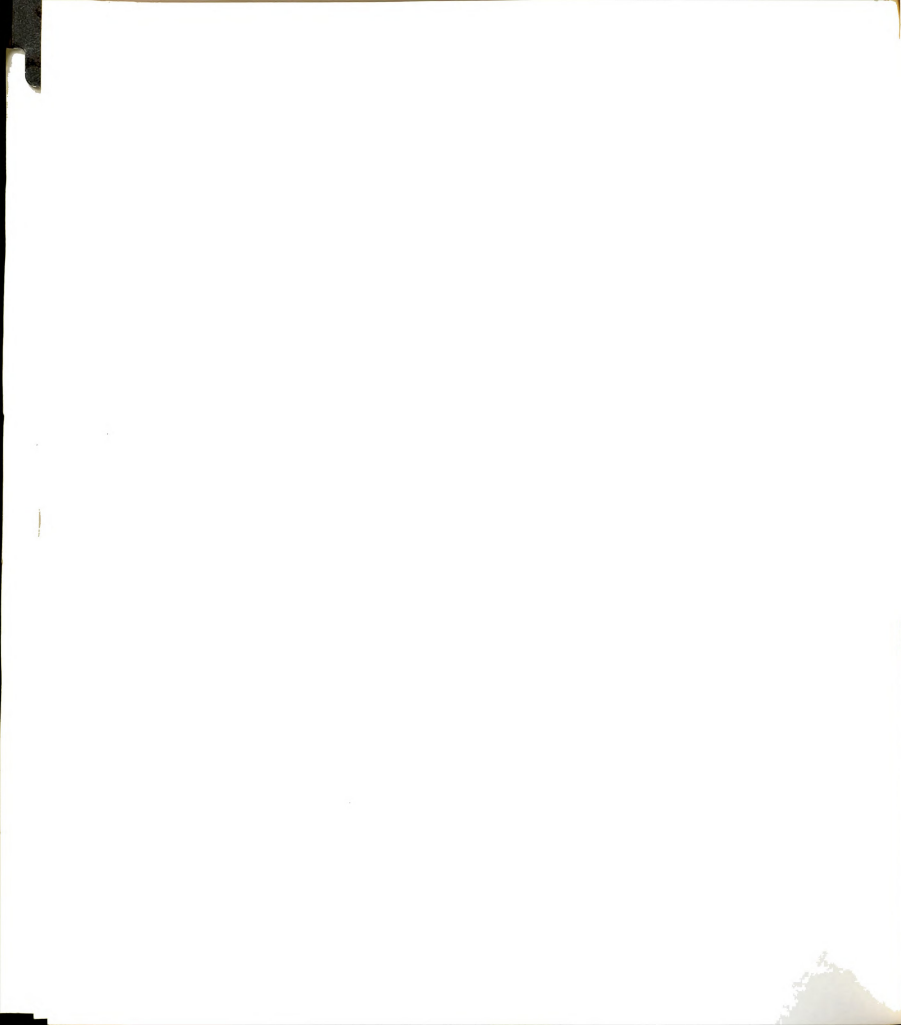
The dates of resignation reveal an interesting pattern which links up with the establishment of Steel Structures by Mr. Bizzaro. Of the 40 who resigned between 1958 and 1965, 30 or about 75% resigned between October, 1964, and May, 1965, which coincides with the establishment of Steel Structures. There was no attempt made to cross-check with Steel Structures to find out whether most of those who resigned went there, even though this was strongly asserted by most of the workers and by management. In spite

ORGANIZATIONAL CHART: METAL CONSTRUCTION FACTORY



*The majority of the workers are skilled and semi-skilled fitters and welders with a few operators and apprentices. Apprenticeship in the factory lasts from anywhere between 3-5 years or more depending on good conduct and when the management feels that a worker is qualified to be out of apprenticeship. There are thus no standards for apprenticeship. Workers who come with government trade tests are not rated as such and such ratings depend on management.

Chart 3.2. Organizational Chart of Metal Construction Company



of these assertions, a number of the letters of resignation leave no clue as to where the workers are going even though most of them indicate a "pleasure in leaving your company." However, two of such letters of resignation (one of which is reproduced here in full) did indicate the force of tradition. The first letter indicated that "my brother want me to come down to Ibadan to look after his shop." The second is reproduced in full:

Sir:

In fact if I had known that my going home on leave would course the end of my work with you, I would have not gone at all.

But I thought that my having not seen my parents for the past five years will be sensible since this opportunity is at my disposal during this leave you gave to me to enjoy with them.

This followed a very tough argument and I was surprise as I was preparing to come back to spend the rest of my leave here in Lagos.

I left Lagos for my home town on the 27th Dec. 1964 and returned on the 2nd Jan. 1965, due to the very matter my father landed to me.

In his points of argument he said, that people have been claiming parts of his lands, of farming, Rubber Plantations, Cocoa Plantations and even the little Palm Oil Plantation that he has.

Then he thinking of all these things if I have been with him there would have not been any possibility of these people taking some parts of these lands.

That I should think in the other hand of his old age. That there is no one else to look after the rest of the family again since the death of my senior brother.

That not only money that could make one happy in life but that once presence counts more in case of imagency call.

In fact sir not all he said I can express here. As you must very well trust, I tried to tell him of the progress I have made ever since my absence from him five years now and also point to him how the Company is going to expand which determined a brighter future ahead of me in the Company.

On the whole the rest members of the family criticises my views and stating that all they wanted is my coming home to care for my old parents and their properties.

Well as one can not fight a dozen I realized at the later part of this matter that it was an arrangement they made which I cannot help.

So for this I regret to inform you that my going home on leave has coursed a discomfit to my ways.

Never theless as I take this letter as a letter of my resignation with one week notice as from this day 4th January, 1965, I still promise you that God wishing, if I can not cope with condition of things at home I shall still come back and we may still work together again.

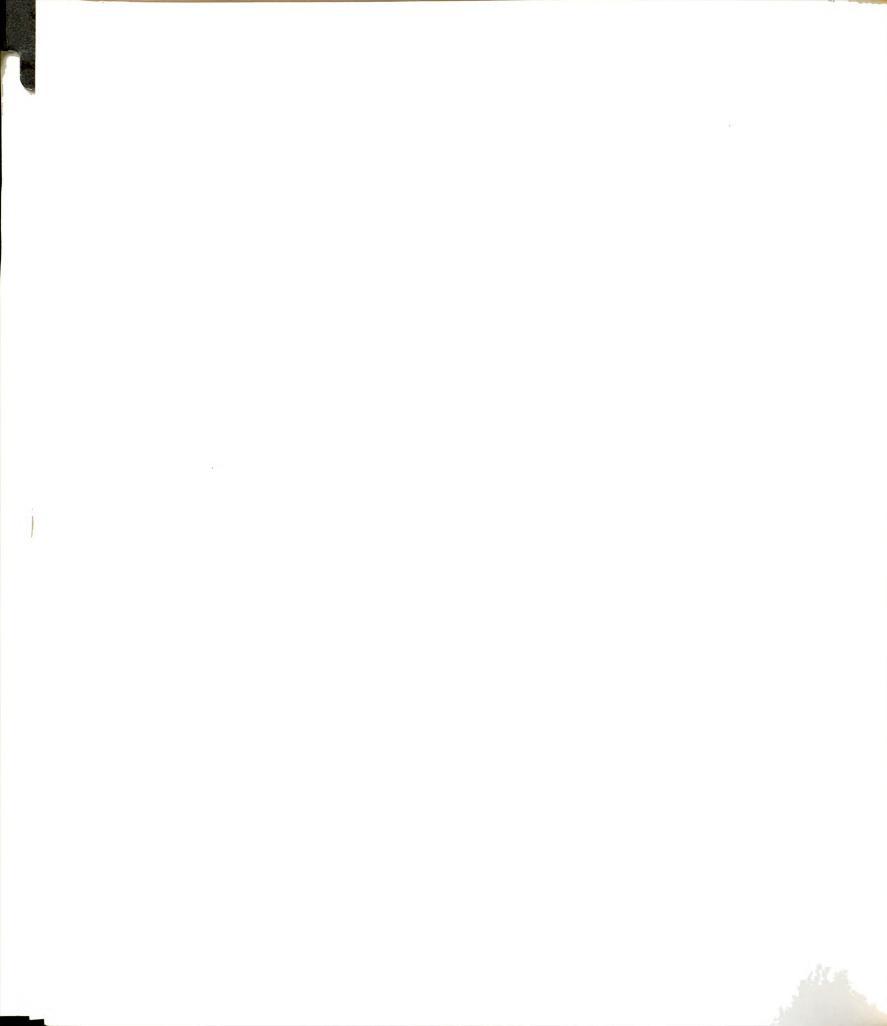
I have made up my mind to live Lagos at the end of this month while I come to collect my leave money at any time after this one week notice.

I should therefore humbly like to take this opportunity that you extend my regretive resignation of my appointment in the Company to the Director, members of your staff and my fellow comrades in the workshop for this great disappointment of mine.

While I wish you best of the seasons all the New Year round and more friendliness good understanding within us.

I remain,
Yours obediently,

The pace of work in this factory is less machine controlled compared to the machine operators in Metal Containers, and the workers have greater freedom of movement and can control the quality of their work. Welders and fitters can work on tanks either in the body-building



section or in tankers section. In addition, they can take pauses while welding or fitting unlike Metal Containers workers. On the other hand, work in Metal Construction is much more dangerous because of the heavy steel structures and also because of the effects on the eyes of continuous welding. Many of the workers complained about this aspect of the work in addition to the fact that the factory has no clear-cut policies on annual increments. As indicated earlier, a number of the workers, in lieu of such increments, look forward to overtime work as a means of increasing their wages. Out of the total wages of about £2,000 or \$5,600 paid out in May, 1965, overtime pay accounted for about £500 or \$1,400 which is 25%. Thus overtime increases the monthly wages of the workers by about one-quarter. Furthermore, the overall monthly wages of Metal Construction workers are about the same as those of Metal Containers workers after excluding overtime pay. On the whole, then, it is fairly safe to say that general conditions of work are better in Metal Containers while wages are about equal in both factories. Both factories have the problem of "staffing," i.e., paying workers on a monthly salary basis and even though workers in both companies complain about this, workers in Metal Containers complained most about lower wages while those in Metal Construction complained most about conditions of work.

One night during a free discussion after the night

shift the workers complained about the conditions of work. I asked them: "You have all complained about your conditions of work and so on; suppose I have power to change things here and I tell you, okay, I will give you most of the things you ask for but I will cut your wages say by 5% or 2%; will you agree?" The reply was immediate. One of the workers spoke for the rest.

Oga, you 'sef, you know our work is very hard and we do too much work here. Anyway, if they give us good leave allowance and more important, if they don't terminate workers as they do now and give us Christmas bonus or something like that it will be very nice and as for me, they can leave me on the same salary for two, three years, I don't mind. I will not like for them to reduce my salary because even now I do a lot of work and the money itself is not enough, much less than what my mates in other places are making. But if I know that my life is safe and my work is sure and I am treated like a human being, I don't mind, they can keep their increment. I mean, how can you go to work in the morning and you are not sure whether that is your last day at work or not. If I know that my work is sure, I don't mind. If I want to make more money, I can set up petty trading for my wife or open a small workshop of my own as long as I know that my work is sure and my daily bread is sure too.

All the workers agreed with this.¹

However, in spite of all these, when asked what factors will make them quit their jobs, a majority mentioned poor wages followed by the perception of their relative deprivation when compared to the attainments of their peer group--"I want to be in a place where I can meet my responsibilities like my mates."

¹Field notes MCC No. 5.

3. Nigerian Bottling Company, Ibadan

The Nigerian Bottling Company (abbreviated NBC) started production in Ibadan in March, 1962. It is owned by A. G. Leventis & Co., Ltd.--a private Greek company which has a variety of other interests and the NBC is just one of such interests. The factory which produces Coca Cola, Fanta Orange, Sprite, Fanta Lemonade, Fanta Ginger Ale, Fanta Tonic Water and Fanta Club Soda, employs about 94 workers, 23 of whom are engaged in actual production. White collar sales workers and storesmen together with general labor and managerial staff account for the rest. Out of this total, our study interviewed 16 of the production workers randomly selected and also 12 randomly selected sales and stores white collar workers. This gives a total of 28 workers representing about 30% of all the workers in this factory.

The pace of work on the production line is very much machine controlled and a number of the workers, particularly the bottle inspectors, complained about this. In contrast to the other two factories, all the workers here, blue-collar and white-collar, are on monthly salaries rather than on daily paid basis. The average monthly income for production workers is between £7.10/ - to £8 or about \$22.40 which is lower than in the other two factories where the average is about £12 or about \$33.60. In spite of this, there are fewer complaints about salary in the NBC.

It may be assumed that being on a salary instead of on wages is related to relative satisfaction. Being on a salary, in Nigeria, has certain prestige factors which from our point of view might tend to minimize the invidious comparisons with relevant peer group members.

Here is a description of work flow on the production line. The logical place to start is the washer-inlet at which point are placed two workers called washers-inlet. Their job is to get the bottles into racks which are arranged in straight lines into which a bottle each can go and these form a horizontal line of 24 bottles, i.e., one case. As they get arranged, they are automatically pushed into the washing machine which washes the bottles. The capacity of the washing machine is given as 160 cc.

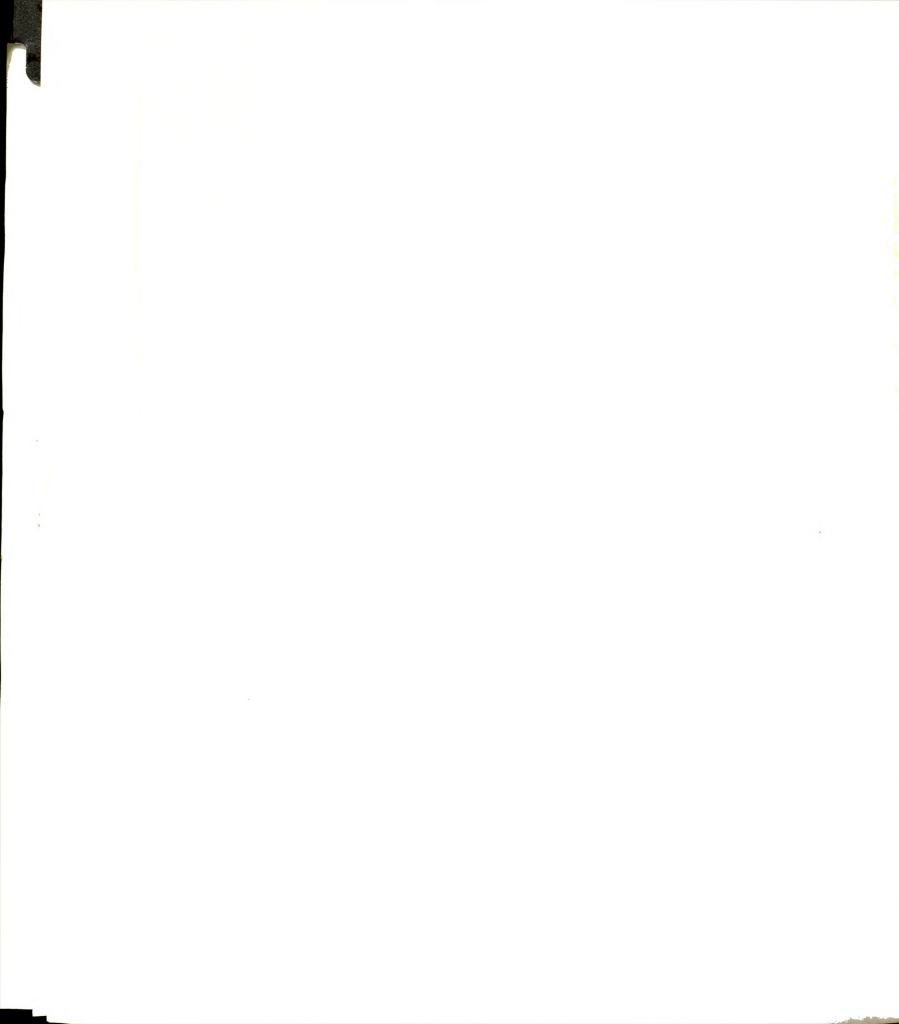
The washed bottles come out in horizontal rows of 24 at the washer outlet. A man is sitting just before the bottles, checking the bottles as they come out from the washing machine. He is called washer outlet and his job is to prevent the bottles from falling off the rails.

The washed bottles then go by a conveyor-belt through a lighted machine which lights a white background so that the bottles are clearly reflected and seen. A man sitting on a chair about three feet high checks the bottles as they pass through the light. He is called the inspector empties and he checks for bottles that are cracked, not well washed and similar things. In fact there are two

inspectors empties and each works for thirty minutes at a stretch and is changed by the other. The inspector not working through the light for cracked bottles, etc., i.e., the relieved inspector, will stand by for another duty. The 'disqualified' bottles are put into cases that sit by the inspector so he can just grab the bottles and put them into the cases. When the cases are full the relieved inspector carries them back either to be rewashed or put aside if they are broken.

After this point, the cleaned good bottles continue through the same conveyor belt into the filler machine. There are two buttons--the filler machine operator presses one and the conveyor belt stops; he presses the other and it moves on, carrying the bottles with drink either Panta Orange, Coca Cola, etc., filled by the filler machine. As the bottles come out from the filler they go round almost immediately through the Crowner, i.e., the crowning machine which crowns the bottles and they proceed through a conveyor-belt to a light similar to that of the inspector empties. This time it is the inspector fulls who checks them. At this point we will interrupt the sequence to show how the drinks get into the filler machine.

This is done upstairs in a large air conditioned room. There are 6 tanks, 4 for syrup and 2 for water, one for washing and the other for bottling. (Here we describe Panta Orange production which is about the same process as



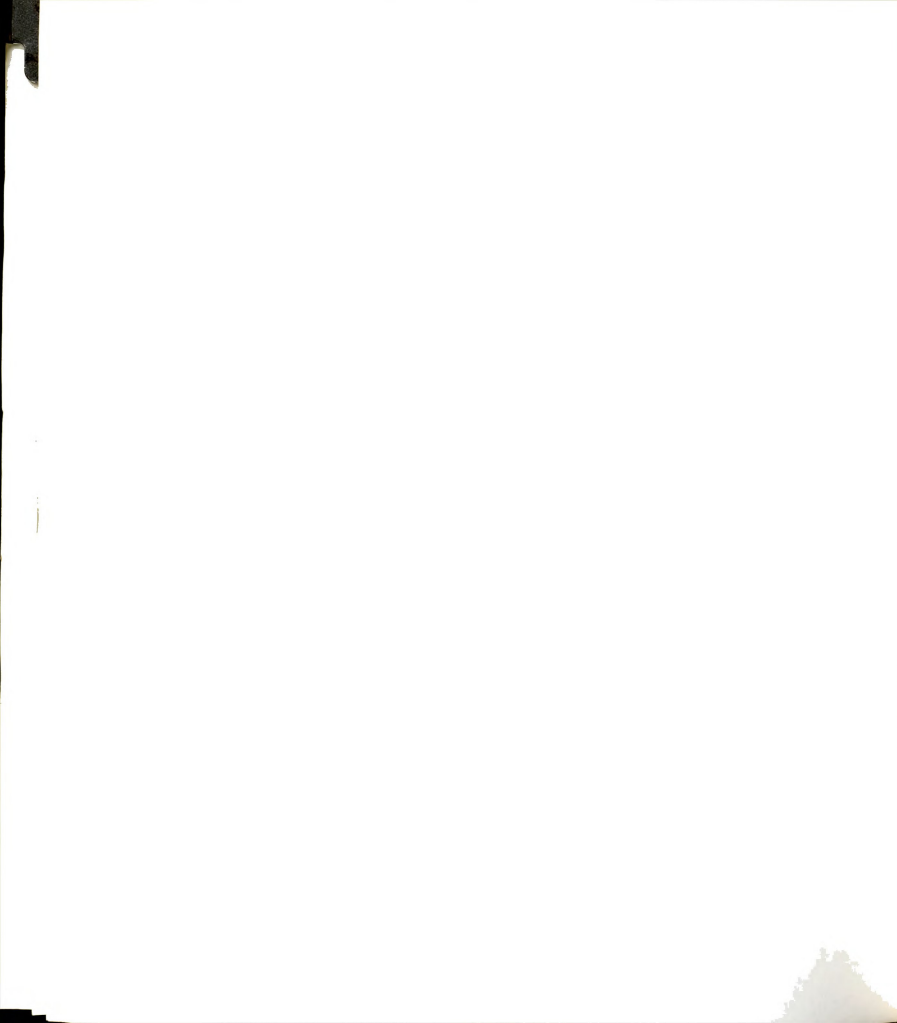
other drinks except for the ingredients used.) Very fine granules contained in plastic containers are poured into the syrup tank; a liquid contained in bottles is also poured into the same tank. The liquid and the granules or powder are mixed in the syrup tanks automatically into syrup and they pass through a plastic tube downstairs into a pre-mix machine. Meanwhile, treated water in the tanks also flows into the pre-mix and they are there proportionately mixed. The resulting product is the drink which then passes automatically from the pre-mixer into the Cooler where they are cooled at different temperatures and also mixed at different percentages of gas.

<u>Drink</u>	<u>% of Gas</u>	(702 lbs.) Cooling degrees (gas pressure)
Fanta Orange	1.8%	32° F
Coca Cola	3.8%	46° F
Tonic	4.0%	50° F
Soda	5.0%	55° F

From the cooler the drink goes into the filler.

The bottled and crowned drink passes through the inspector fulls--there are two of them as in the case of empties. The inspector checks the level of the drink in the bottle, i.e., whether or not it is full, whether it is uncorked or whether it has particles in it.

From here the "qualified" bottles go through a conveyor-belt onto the accumulating table. In between the inspector fulls and the accumulating table is the meter which checks the number of bottles produced, i.e., production



level so as to tally it in the stores. As the Supervisor put it:

If the Storekeeper says he has 49 cases when my meter indicates 50 cases, I know there is something wrong somewhere between accumulating table and Stores.

From the accumulating table where three men are working they are put into cases and rolled down a roller-belt.

The organizational charts of the whole factory and the production section follow.

ORGANIZATIONAL CHART: PRODUCTION SECTION

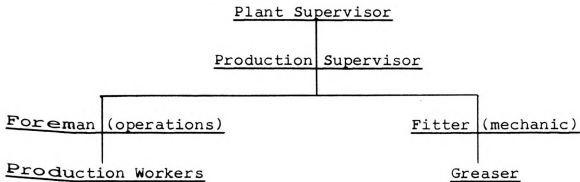
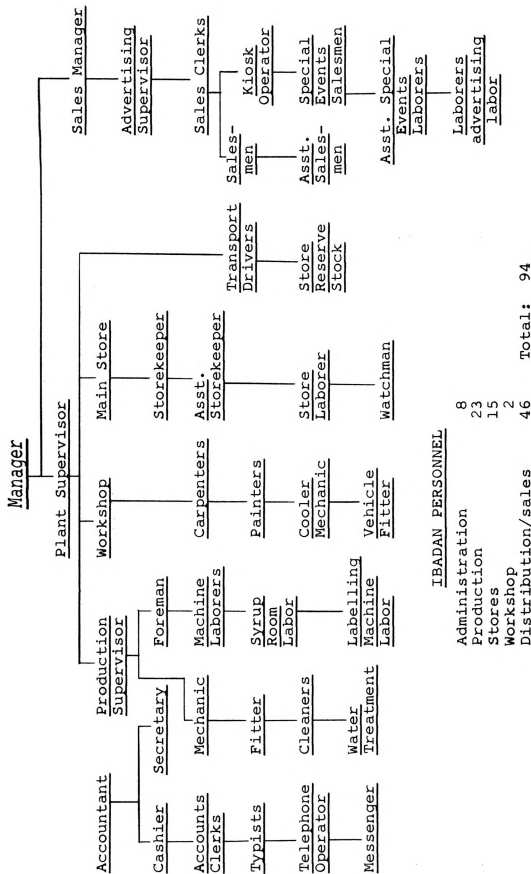


Chart 3.3. Organizational Chart of Production Section of Nigerian Bottling Company

Labor turnover was said to be very low but there is no way of checking this as the researcher was not allowed access to the relevant files. However, a number of the workers indicated that very few people have left. This may be accounted for by the relative newness of the plant and also the relative scarcity of comparable job opportunities in Ibadan. The skill level is also very low, most of the blue-collar workers being unskilled. In fact, only one

ORGANIZATIONAL CHART: NIGERIAN BOTTLING COMPANY, IBADAN

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IBADAN PERSONNEL

Administration	8
Production	23
Stores	15
Workshop	2
Distribution/sales	46
Total:	94

Chart 3.4. Organizational Chart of Nigerian Bottling Company

blue-collar worker, the fitter, has any skills to show for. The other two factories described above have a large concentration of skilled workers. As indicated in the section on the overview of economic conditions in Nigeria, soft drinks have increased production over the past few years and are profitable even among those run by government in partnership with private concerns like Pepsicola.

There is no plant labor union in this factory even though it is represented by a larger national trade union and none of the workers showed any particular interest in union activities. The larger national union sporadically, over long intervals punctuated by long periods of utter inaction, performs the functions of the local plant union in negotiations.

Of the six top managerial positions two are held by Nigerians--the sales manager who came here after being dissatisfied with what he called "nepotism" in another bottling factory in Ibadan, and the Production Supervisor who has strong ambitions of going abroad to study economics. All the remaining four expatriates, who are also in top management position, are Greeks. The plant supervisor was very critical of people from other places praising what he called the "Greek sense of business."

General conditions of work are a little better than Metal Construction but fall far short of Metal Containers. An aspect of work in which workers at NBC expressed great



interest was their freedom to drink half-filled bottles or other rejects. However, many of the workers complained about the machine pacing as one of them indicated:

When there is some trouble and the machine stops, hallelujah, because then I can breathe and go to the lavatory if not it is all work, work, work and no break. Before you can even go and urinate, you have to beg and beg for another person to take your place and when the machine is working, there is nobody to take your place so you can even piss inside your trousers.¹

This is borne out by other workers and the factory has no clear policy for breaks. The workers take about 15 minutes to eat lunch and they do it in turns so that production can go on. There are no medical facilities provided for the workers and the workers did not complain too much about this. Perhaps this is due to the fact that the work is not particularly dangerous and medical facilities are relatively easier to come by in Ibadan than in Lagos.

Finally, our sample from this factory does contain one female worker operating the kiosk. It should be mentioned immediately that because of the smallness of the female sample it is difficult to use it for any comparative purposes. This is in spite of the findings of Zaleznik and his associates that female workers are relatively more satisfied than male workers. Because of the smallness of the female sample, we lumped them together with the male respondents.

¹Field notes NBC, No. 4.



4. Lafia Canning Factory, Ibadan

Lafia Canning Factory is a project of the Western Nigeria Development Corporation. It was established in 1953 at a capital cost of £350,000 or \$980,000 but came into operation in 1954. The purpose of setting it up was "to assist in the control of the 'swollen shoot' disease which had infected large areas of cocoa plantations [and which was] obviously going to upset the economy of the Nigerian farmers in the areas under treatment as their main cash crop would be lost to them. As citrus grows very well in Nigeria, these cut-out areas were planted with oranges and grapefruit and pineapples and the cannery was constructed to provide the necessary outlet for the fruits."¹ The rated fruit intake capacity of the plant is estimated at 2,000 tons per season of six to seven months. When operating at full capacity, the plant is supposed to employ 120 female and 40 male seasonal workers in addition to 12 female and 30 male permanent staff. The primary products of the factory are:

1. Pineapple slices--chunks--crush
2. Pineapple juice
3. Grapefruit segments
4. Grapefruit juice
5. Orange juice
6. Lemon juice
7. Mango slices
8. Mango pulp

¹A one page paper produced by the Lafia Canning Factory, printed by A. C. Press, Ibadan.



1



At the start of our study the factory employed, at the Ibadan plant, 42 permanent workers. Of these only five were interviewed representing only about 12% of the permanent staff. None of the seasonal workers were interviewed. The permanent staff includes managerial personnel, white-collar and blue-collar workers and our sample includes one white-collar worker. Our main concern, however, is the production section.

We now give a brief description of the production process from raw-materials intake to final product. The Lafia Canning Factory is just one project of the many projects of the Western Nigeria Developing Corporation (WNDC). The WNDC also runs a farm independent of the factory (i.e., in terms of administrative control). The farm is primarily concerned with supplying fruits to the factory.

And so a lorry load of lemon comes into premises of the factory. (A lorry is the American equivalent of a truck.) The lorry together with the fruits is weighed and the weight registered on a card. The lorry then travels about 25 yards within the premises to the off-loading platform. Someone moves a lever and the lorry is tilted backwards to allow the fruits to be discharged onto a roller-conveyor which carries them up through the roof into a building which has six compartments called biens. The biens are storage spaces. There is an outlet manually controlled by raising something like a trap door which

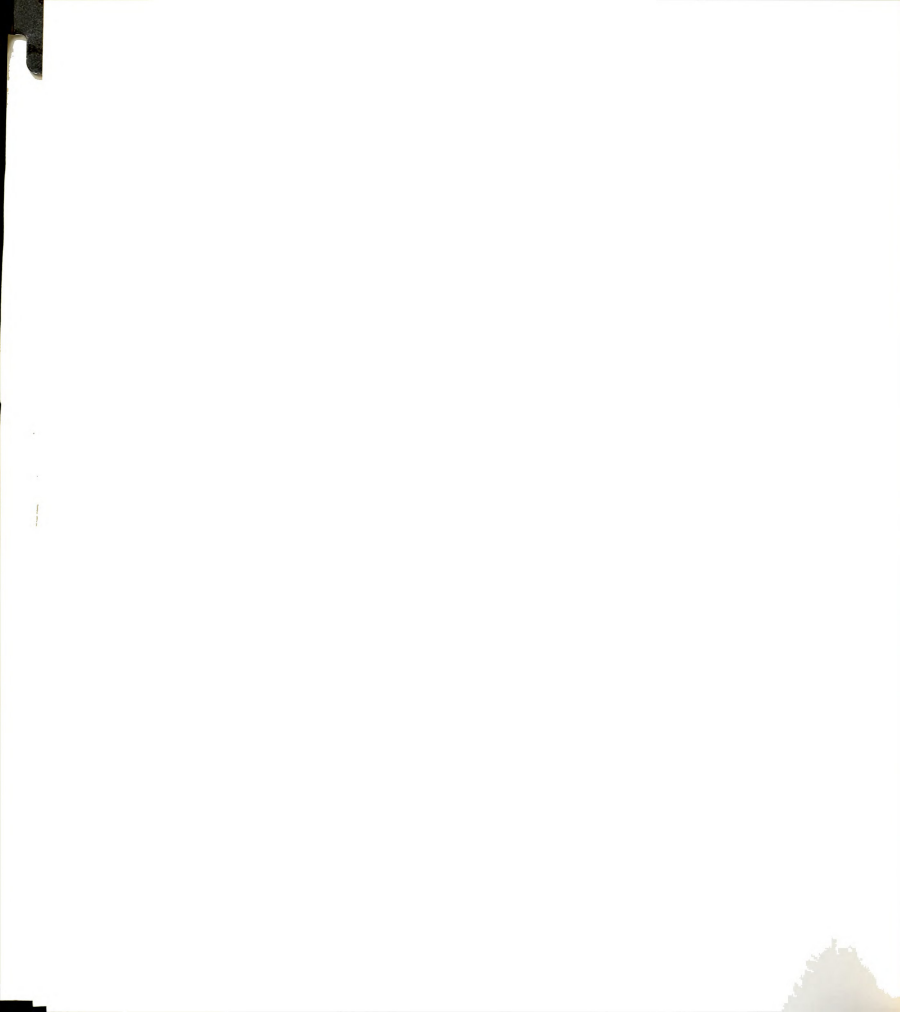


allows the fruits then to move onto a rubber belt conveyor.

From this point on we will discuss the processing of orange juice since this was what they were still processing at the time of research. Furthermore, just for the sake of style (and possibly elegance!) we will use one fruit, i.e., one orange as it goes through the production line.

The fruit moves from the rubber conveyor belt for about 10 yards into a washing machine which brushes and washes the fruit at the same time. Then it moves on to the grating machine which grates off the back of the orange for oil extraction. At this point there is a bifurcation--the orange with back grated off and the back that is grated off. (We will follow the course of the back first.) From the grating machine, the back goes into the sifter which sorts out the chaff while the remaining oil and water (i.e., extracted from the back of the orange) flow into a container also called a tank. (All what we have described so far are on the floor--first floor of the factory.) From the tank a pipeline takes the oil and water first upstairs and then downstairs to the floor into a machine where the oil is separated from the water. (At this point it will be better for us to go back to the grated orange and continue with it.)

Waiting for the orange as it comes out from the grating machine and passes through a series of watering



pipes that again wash it, are four women. If they discover that it has not been grated at all or only partially grated, it is taken back into the grating machine. The well grated orange then moves up through another conveyor-belt to the juice extractor which is located on the second floor. The extractor extracts the juice from the orange.

Nearby is a tank containing a combination of water and soda for sterilizing machines.

The juice thus extracted passes through a pipe into a screw-finisher which separates the seeds and the cells from the juice. The juice "proper" then goes through a pipe which has a filter interlaid with nylon at the center. This is to filter out the little bits and pieces that escaped from the screw-finisher. It continues to flow through the pipe into five storage tanks from juice.

From these tanks the juice passes into a pasteurizer where juices are pasteurized at 200° F. The juice leaves the pasteurizer and flows into an automatic filling machine. By now the cans which come through another conveyor-belt after being sterilized arrive and are accordingly filled. It is the empty can that the automatic filling machine fills. The filled can moves on to a sealing machine which automatically seals the can and codes it at the same time.

The can leaves the sealing machine onto a conveyor belt which carries it into another sterilizer where the

can is sterilized at 210° F for two minutes.

From the sterilizer it goes into a cooling tank where it is cooled and then sent to the Store for labelling. There is a labelling machine but it is not functioning at the time of research. The automatic filling and sealing machines described above were also not functioning at the time of research.

What was operating at the time of the research was: Instead of the pasteurized juice going into the automatic filling machine, it goes into another tank where about six women manually filled the cans which are brought empty and carried away full by another set of women workers. From now on we will distinguish them as fillers and carriers. It is interesting to note that the fillers and carriers are officially designated differently according to whether they are permanent staff or casual labor. They are also distinguished by dress. The fillers who are permanent staff wear a green dress and a green head-tie and are designated "charge-hands" while the carriers who are casual labor wear blue dress with a blue head-tie and are designated "ordinary labor."

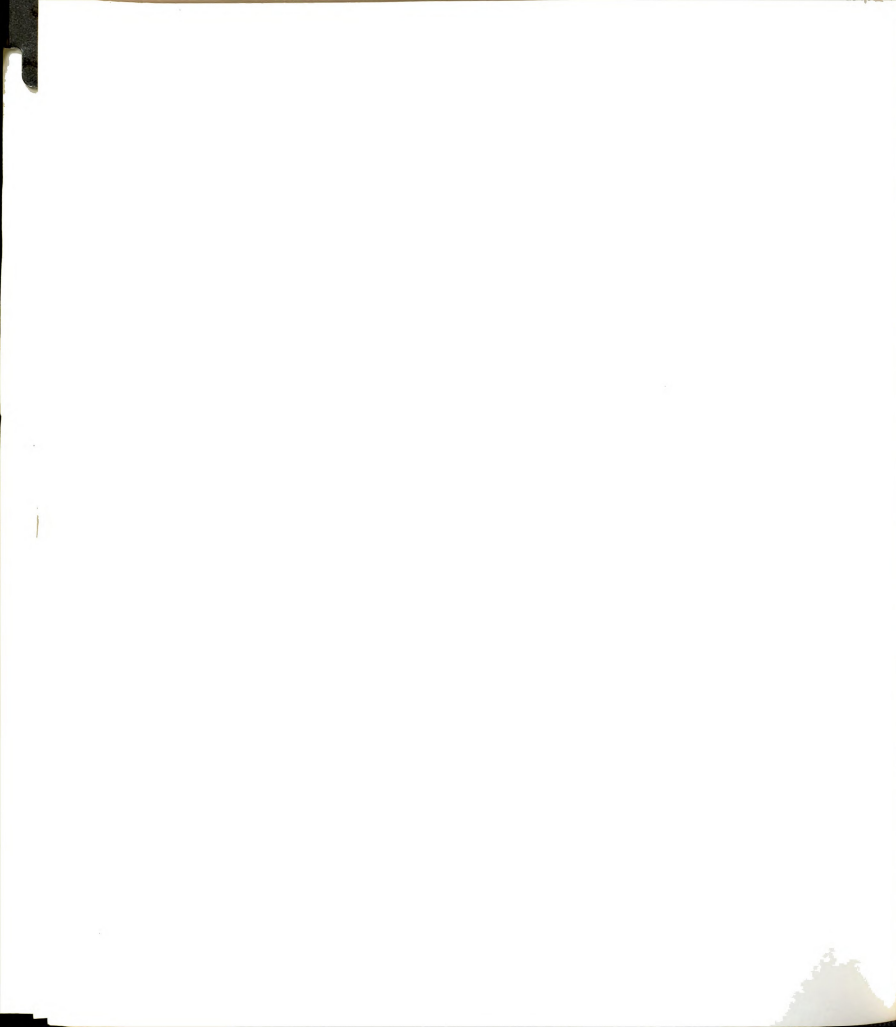
The carriers take the cans to a table at a distance of about five yards where a set of four girls make sure that they are well filled and then hand them sideways to a man who manually operates a machine that seals the can. After this the can is carried manually into a

sterilizer at 210° F for two minutes and then cooled as explained above.

And now we go into the room where the oil is being extracted and the water wasted. This is the strand we left off about the back of the orange that was grated. The oil and water enter what is called the Centrifuge Machine which automatically extracts the oil and drops it into a bucket placed under it and wastes the water through a pipe leading to a gutter. When the bucket is full, it is manually carried into a tank for storage. The machine which separates the oil from the water is called Centrifuge Machine but it was trademarked Shaples Centrifuge, Ltd., England.

At this point we move into a room on the ground floor where the cans are reformed. The cans actually come from Britain flat and they are reformed into a round shape and flanged. They are then put into a machine, manually operated, to seal off the bottom. After sealing the bottom they are carried into a storage room on the second floor. There is an automatic machine which, when the cans are manually put into it, sterilizes the cans and sends them through a conveyor belt onto the filling machine.

Pineapple: Pineapple processing, i.e., pineapple slices is slightly different from fruit juice processing. The back of the pineapple is removed and so is the cork by some kind of threshing machine. It then goes into another machine called the eradicator which removes the



surface, i.e., after the back has already been removed. The pineapple is then washed by the same process as oranges are washed. Then via a conveyor-belt it goes into a slicing machine which after slicing it passes the slices through a surface washing area into another surfaced dry area where about four girls are waiting to sort the good from the bad slices. The good slices are canned directly but not sealed.

The slice-in-can then passes through a conveyor belt on to an automatic syruper which syrups the slice inside the can. Then it goes down to the exhauster where it remains for 17 minutes at a temperature of 210° F. When it comes out from the exhauster, it goes into an automatic sealer which seals it and, when it is functioning, into the automatic cooker-cooler machine which automatically sterilizes it for 12 minutes at 210° F (compare this with the 2 minutes for orange juice). Then it automatically moves into the cooler section of the machine where it is cooled and ready for labelling. But as the Forewoman explains as to why the cooker-cooler machine is not in use: "You see, this machine does not function too well. You know, many times you will have some cans hiding somewhere in the machine and not coming out and since it is very difficult to go inside the machine, a number of the cans stay there and get spoilt."



Table 3.4. Distribution of Lafia Canning Factory Workers by Section

Production.	4
Administration (production)	3
Engineering	12
Security.	4
Medical	2
Lab. attendant.	1
Washer woman.	1
Labellers and packers	4
Packer.	1
General labor	3
Administration (office)	5
Accountant.	1
Manager	<u>1</u>
Total	42

The general conditions of service are better than in the other three factories as government promotion leave and hospitalization policies apply to all permanent workers. However, a number of the permanent workers complained about nepotism as two of the top workers put it: "It is not what you can do but who you know that can push you up." The working hours for blue-collar workers are from 7 a.m.-4 p.m. with one hour break (10 a.m.-10:15 a.m. and 1:15 p.m.-2 p.m.) while for white-collar workers the hours are from 8 a.m.-4 p.m. with one hour break (10 a.m.-10:15 a.m. and 1:15 p.m.-2 p.m.). Thus blue-collar workers work 8 hours while white-collar workers work 7 hours. All the workers except the manager and the accountant belong to the Western Nigeria Development Corporation and Allied Industrial Workers Union. However, union activities, controlled largely by white-collar workers, are not particularly strong. They are

actually uneventful.

Finally, we turn to turnover rates for 1953/54 and 1954/55 for which figures were obtained by computing from personal emoluments pay vouchers.

Table 3.5. Turnover Rates at Lafia Canning Factory

Month	Employment Previous Month	New Employees	Those that Left	Total
Aug. 53		12		12
Sept.	12	2		14
Oct.	14	1		15
Nov.	15			15
Dec.	15			15
Jan. 54	15	1		16
Feb.	16			16
March	16	1		17
April	17			17
May	17			17
June	17			17
July	17			17
Aug.	17	3	1	19
Sept.	19	9		28
Oct.	28	7	3	32
Nov.	32	9	3	38
Dec.	38		2	36
Jan. 55	36	4		40
Feb.	40	4	2	42
March	42	1	8	35
April	35	4	1	38
		58	20	

What this indicates is that during this period there was relatively low turnover. For a year--August, 1953, to July, 1954, there was zero turnover and for 21 months, out of a total number of 58 employed during this period, 20 left accounting for about 34.5%. These are permanent staff. A majority of those who left did so between October, 1954, and March, 1955; otherwise the labor force remained

relatively stable. This period coincided with the introduction of regionalization with most of the non-Western workers leaving for their regions of origin.

Table 3.6. Comparison of Turnover Rates for the Four Factories

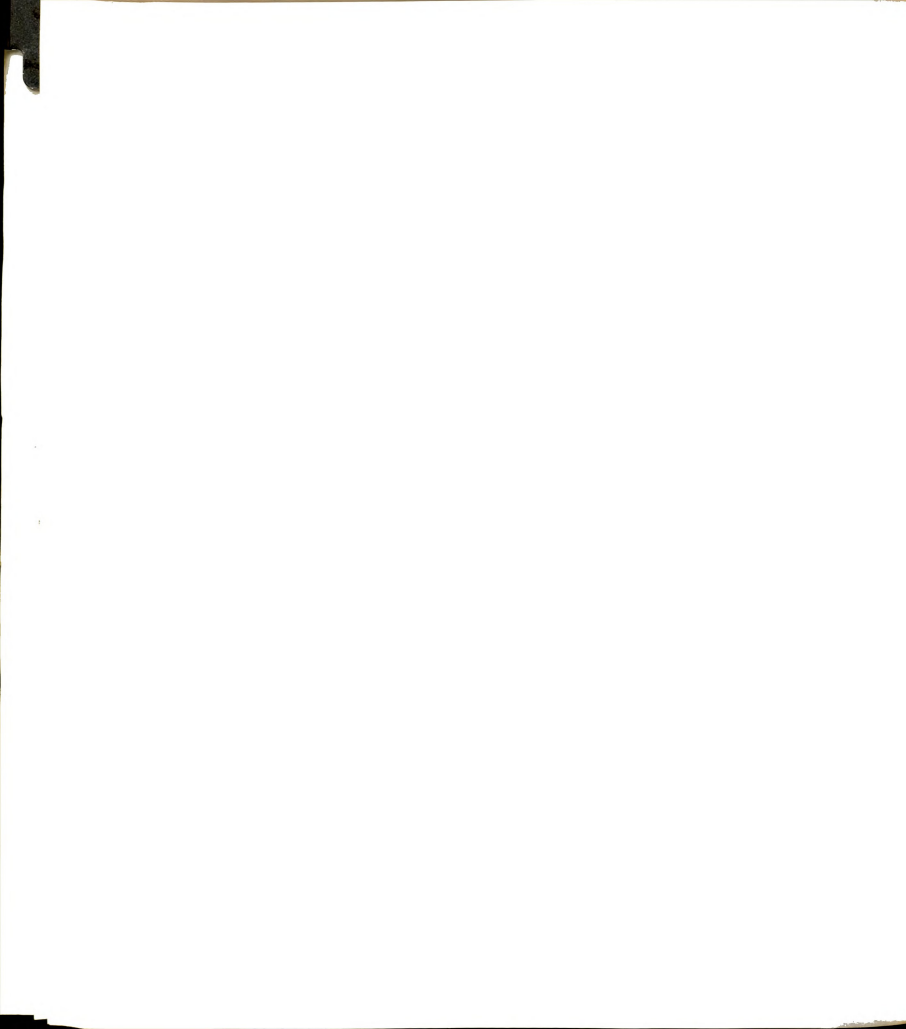
Metal Containers	16.0%
Lafia Canning	34.5%
Metal Construction	39.0%
Nigerian Bottling	Unknown (possibly low)

Let us now compare the four factories on a few selected variables.

Table 3.7. Comparison of Selected Variables in Four Factories

Factories	a. <u>Turnover</u>		
	High	Medium	Low
Metal Containers			x
Nigerian Bottling		x	
Lafia Canning	x		
Metal Construction	x		
	b. <u>Machine-Pacing</u>		
	High	Medium	Low
Metal Containers	x		
Nigerian Bottling	x		
Lafia Canning		x	
Metal Construction			x
	c. <u>Conditions of Service</u>		
	Excellent	Good	Poor
Metal Containers		x	
Nigerian Bottling		x	
Lafia Canning	x		
Metal Construction			x
	d. <u>Skill Level</u>		
	High	Medium	Low
Metal Containers		x	
Nigerian Bottling			x
Lafia Canning			x
Metal Construction	x		
	e. <u>Local Labor Union Organization</u>		
	Strong	Medium	Weak
Metal Containers	x		
Nigerian Bottling			x
Lafia Canning			x
Metal Construction	x		
	f. <u>Competition for Internal Product Market by Others</u>		
	Strong	Medium	Weak
Metal Containers			x
Nigerian Bottling		x	
Lafia Canning			x
Metal Construction	x		
	g. <u>Quality of Products Produced</u>		
	Good	Medium	Poor
Metal Containers	x		
Nigerian Bottling	x		
Lafia Canning		x*	
Metal Construction	x		

*This is due to the type of limes produced which have thick barks and so increase the acidity of the fruit, thereby reducing their quality for canning purposes.



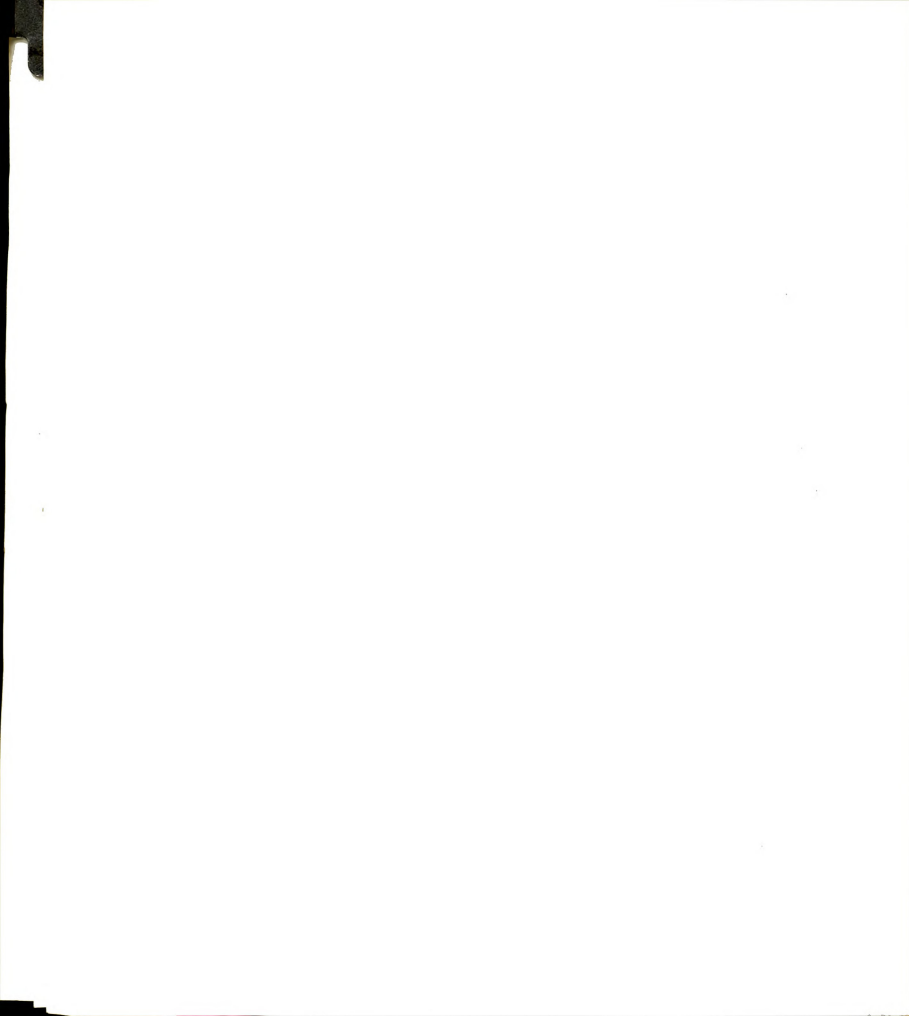
CHAPTER IV

ANALYSIS OF DATA [1]

Introduction

The main purpose of this chapter is to give the general characteristics of the workers in the three main plants. The chapter is therefore organized around two broad variables which are labelled background variables and occupational socialization variables. Background variables deal with general demographic characteristics such as father's occupation, age, education, rural-urban residence, marital status, number of wives, number of children, ethnicity, mortality pattern of parents and religion. On the other hand, occupational socialization variables deal with the kinds of linkages the workers have had with institutions that have some bearing on industrial socialization. Such variables include father's sector of employment, skill level, age and type of first full-time employment, number of job changes, wages and salaries, the location of person who found present job for the worker and occupational aspiration for sons of the workers.

Finally, an attempt will be made to indicate the distribution of these two main variables in the three plants primarily studied. The inter-relationships of these variables, it is hoped, will give the profiles of the workers



in addition to indicating demographic patterns and incipient trends.

1. Background Variables by Factory¹

Father's Occupation

Table 4.1. Distribution of Father's Occupation by Factory

Factory of Child	Father's Occupation				(N)	Total
	Farmer	Trader	Industrial	Clerical		
Containers (1940)	67.2	17.2	8.6	7.0	(58)	100.0
Construction (1958)	70.5	4.5	15.9	9.1	(44)	100.0
Bottling (1962)	55.6	22.2	11.1	11.1	(27)	100.0
Total (N)	85	18	15	11	(129)	
$\chi^2 = 7.0$	df = 6	$p < .35$		$\bar{C} .287^2$	$N = 129$	

¹The fourth factory, Lafia Canning, is not used here because only five cases were obtained and they represent so small a sample that they could not be used for any meaningful analysis. The five cases are used, however, when the analysis deals with all workers without specific reference to any particular factory.

²The contingency coefficient C is used as a measure of association or relation between the variables. Since the use of the contingency coefficient does not necessitate the assumption of underlying continuity for the various categories and since we have mainly categorical information, we deem it uniquely useful. After obtaining the C by the formula $C = \frac{\chi^2}{N + \chi^2}$, we then corrected for the C s.

All corrected C s thus become $\bar{C}$. See M. G. Kendall, The Advanced Theory of Statistics (London: Charles Griffin & Co., 1945); T. C. McCormick, Elementary Social Statistics (N.Y.: McGraw-Hill, 1941), p. 207; C. C. Peters and W. R. VanVoorhis, Statistical Procedures and Their Mathematical Bases (N.Y.: McGraw-Hill, 1940), p. 398.

There is no statistically significant relationship for father's occupation in the three factories. However, about two-thirds of the workers' fathers are farmers and 14% are traders, about 12% are industrial workers and 9% are clerical workers.

Age of Workers

There has been a tendency to characterize African factory workers as being young.¹ The mean obtained for the entire sample was 32 years. From Table 4.2 we can see the age distribution in the three main factories. A significant aspect of this is the relationship between the age of the factories and the mean age of the workers in the corresponding factories.

Table 4.2. Age Distribution by Factories

Age	<u>Factories</u>		
	Containers (1940)	Construction (1958)	Bottling (1962)
N	63	45	28
16-25	11.1	22.2	39.3
26-35	47.6	66.7	46.4
36-45	27.0	8.9	14.3
46 and above	14.3	2.2	0.0
Total	100.0	100.0	100.0
X	34.9	29.6	28.0

$$\chi^2 = 20.5 \quad df = 6 \quad p < .005 \quad N = 136 \quad \bar{X} = 31.2 \quad \bar{C} = .427$$

¹Siebel, op. cit.; see also Elkan and Fallers, op. cit., p. 24.

There appears to be a significant difference in the ages of the workers in the three factories. Workers in Containers are about five years older than workers in Construction and seven years older than Bottling workers. This difference in the age structure can be accounted for mainly by the age of the factories.

It appears that for every 3.6 years difference in the ages of the factories, there is a one year difference in the mean ages of the workers in the corresponding factories. In Metal Containers, established in 1940, the mean age of the workers is about 35 compared to 30 for Metal Construction established in 1958 and 28 for Bottling established in 1962.

Marital Status

The age structure of the three factories is also reflected in the marital statuses of the workers in these factories. Table 4.3 shows that a greater percentage of workers in Metal Containers than in Construction and Bottling are married.

Table 4.3. Distribution of Marital Status by Factories

Factories	Married	Marital Status		(N)
		Single	Total	
Containers	88.9	11.1	100.0	(63)
Construction	55.6	44.4	100.0	(45)
Bottling	42.9	57.1	100.0	(28)
N	(93)	(43)		(136)

$$\chi^2 = 24.1 \quad df = 2 \quad p < .001 \quad N = 136 \quad \bar{c} = .566$$

A greater percentage of workers in Containers than in Construction and Bottling are married. This seems to follow the age structure of the workers in the three factories. Furthermore, a little over two-thirds of the workers are married and a little less than one-third are single. Marital statuses in the factories appear to be significantly different.

Number of Wives

Since polygyny is legally permitted in Nigeria, it is expected that some workers will avail themselves of this opportunity and acquire more than one wife. Table 4.4 shows the distribution of the number of wives in the three factories.

Table 4.4. Distribution of Number of Wives by Factories

Factories	One Wife	<u>Number of Wives</u>		N
		Two Wives	Total	
Containers	75.0	25.0	100.0	56
Construction	92.0	8.0	100.0	25
Bottling	58.3	41.7	100.0	12
N	(72)	(21)		(93)

$$\chi^2 = 5.8 \quad df = 2 \quad p < .06 \quad N = 93 \quad \bar{c} = .356 \quad \bar{X} = 1.2$$

A greater percentage of Construction workers than Containers or Bottling workers have one wife. On the whole, about 77% of all the workers in the sample have one wife. The main explanation for this distribution is the corresponding distribution of education where those with no

formal education tend to marry more than one wife, significantly more so than those with some formal education.

Number of Children

Assuming that fertility rates are randomly distributed, we would expect the number of children to follow the distribution of marital status and number of wives. Table 4.5 indicates this pattern.

Table 4.5. Distribution of Number of Children by Factories

Factories	Number of Children				Total	N
	1-3	4-6	7-10	X		
Containers	56.6	32.1	11.3	3.6	100.0	53
Construction	82.6	17.4		2.5	100.0	23
Bottling	54.5	36.4	9.1	3.6	100.0	11
N	55	25	7	3.2		87
$\chi^2 = 5.7$ $df = 4$ $p < .25$ $N = 87$ $\bar{c} = .333$ $\bar{X} = 3.2$						

There does not appear to be a significant relationship in the number of children in the three factories. This is due to the fact that even though Bottling has the least percentage of married workers, it has the highest percentage of those who are married to more than one wife. Construction workers have the lowest mean number of children. The table also shows that about 63% of the workers in the sample have between one and three children, 49% with four to six children and about 8% with seven or more children. The mean number of children is about three.

Rural-Urban Background

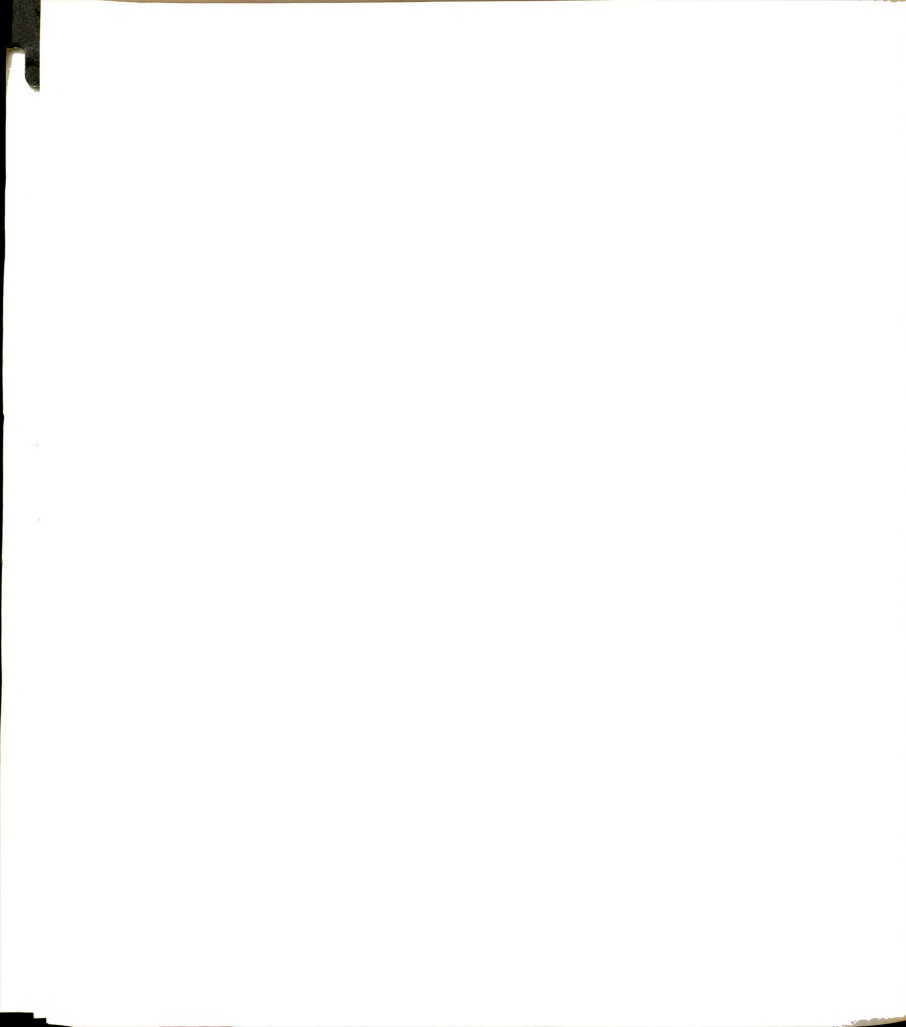
Table 4.6 shows that there are significant differences in the urban backgrounds of the workers in the three factories:

Table 4.6. Distribution of Rural/Urban Background by Factories

Factories	<u>Rural-Urban Background</u>			N
	Urban	Rural	Total	
Containers	81.0	19.0	100.0	63
Construction	51.1	48.9	100.0	45
Bottling	85.7	14.3	100.0	28
$\chi^2 = 14.8$	df = 2	p < .001	N = 136	$\bar{c} = .457$

Bottling Company has the largest percentage of workers of urban background followed by Metal Containers and then Metal Construction. One explanation for this distribution is the ethnic composition of the factories. Yorubas in Nigeria are generally more urban than other ethnic groups.¹ This is also reflected in our total sample. To have a better understanding of this pattern we will discuss the pattern of ethnic and urban distribution.

¹It has been estimated that in Eastern Nigeria (where the Ibos predominate) 7% live in cities, in the Western Region (where Yorubas predominate) 35% live in cities while 4% live in cities in the North (where the Hausas and Fulanis predominate). Vide: K. M. Buchanan and T. C. Pugh, Land and People in Nigeria (London: University of London Press, 1955); and also R. Mansel Prothero, "The Population Census of Northern Nigeria 1952, Problems and Results," Population Studies, X 2 (November, 1956), pp. 166-83.



Since Ibos and Yorubas form about 80% of the sample we will take these as two categories and then collapse all other ethnic groups to form a third category.

Table 4.7. Distribution of Ethnic Distribution by Factories

Ethnic Groups	<u>Factories</u>			
	Containers	Construction	Bottling	N
Yoruba	38.1	8.9	74.1	48
Ibo	38.1	66.7	18.5	59
Others ¹	23.8	24.4	7.4	28
Total (N)	(63) 100.0	(45) 100.0	(27) 100.0	(135)
$\chi^2 = 33.0$ $df = 4$ $p < .001$ $N = 135$ $\bar{c} = .600$				

Ibos and Yorubas are evenly distributed in Containers. However, in Construction, Ibos are disproportionately represented (about two-thirds) while in Bottling Yorubas are disproportionately represented (about three-quarters). The distribution of ethnic groups in the three factories does not seem to be a chance event. Next, we will look at the distribution of urbanity and ethnicity.

These two tables (4.7 and 4.8) explain the reason why Bottling Company has a preponderance of those of urban background. It has a disproportionately large percentage of Yorubas who are generally urban dwellers.

¹These include Ibibio/Ekif 10.4% (14), Edo/Isako 3.7% (5), Ijaw 3.7% (5), Urhobo/Itshekiri 3.0% (4) and Hausa 0.7% (1).

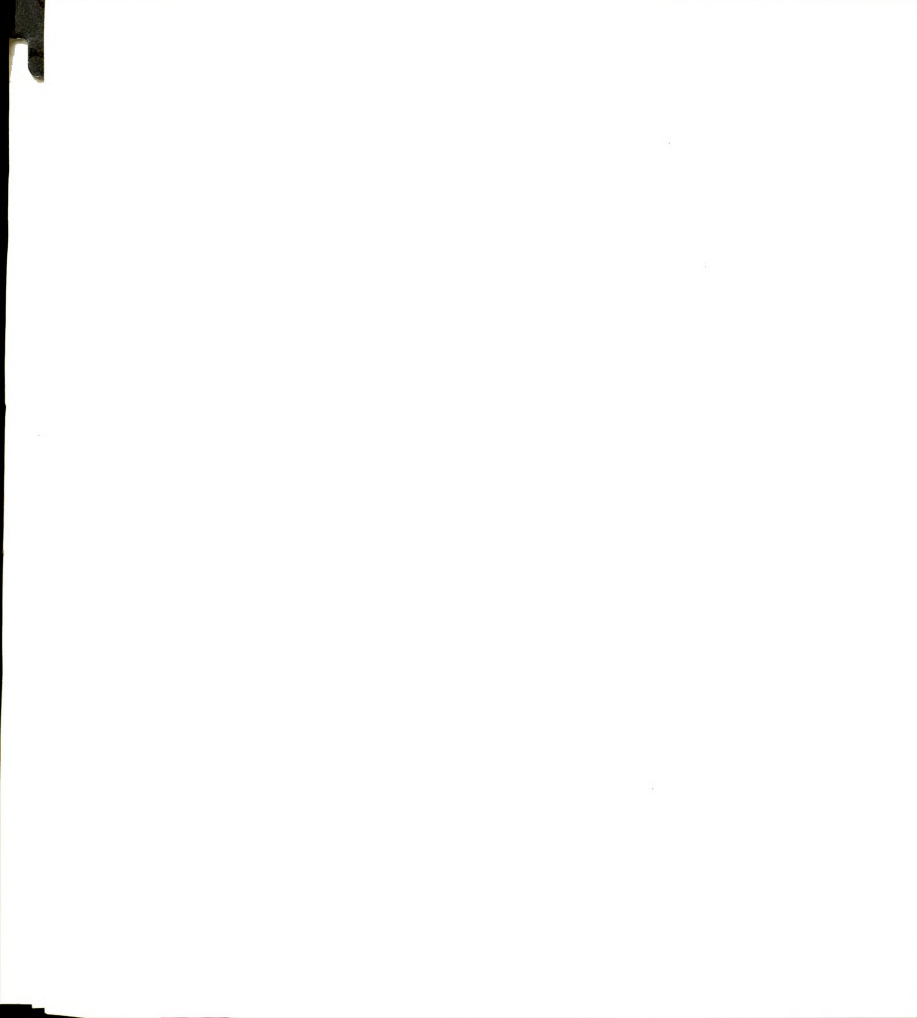


Table 4.8. Distribution of Ethnic Distribution and Rural-Urban Background

Ethnic Group	<u>Urban-Rural Background</u>			N
	Urban	Rural	Total	
Yoruba	86.8	13.2	100.0	(53)
Ibo	59.3	40.7	100.0	(59)
Others	71.4	28.6	100.0	(28)
Total	101	39		(140)
$\chi^2 = 10.6 \quad df = 2 \quad p < .005 \quad N = 140 \quad \bar{c} = .387$				

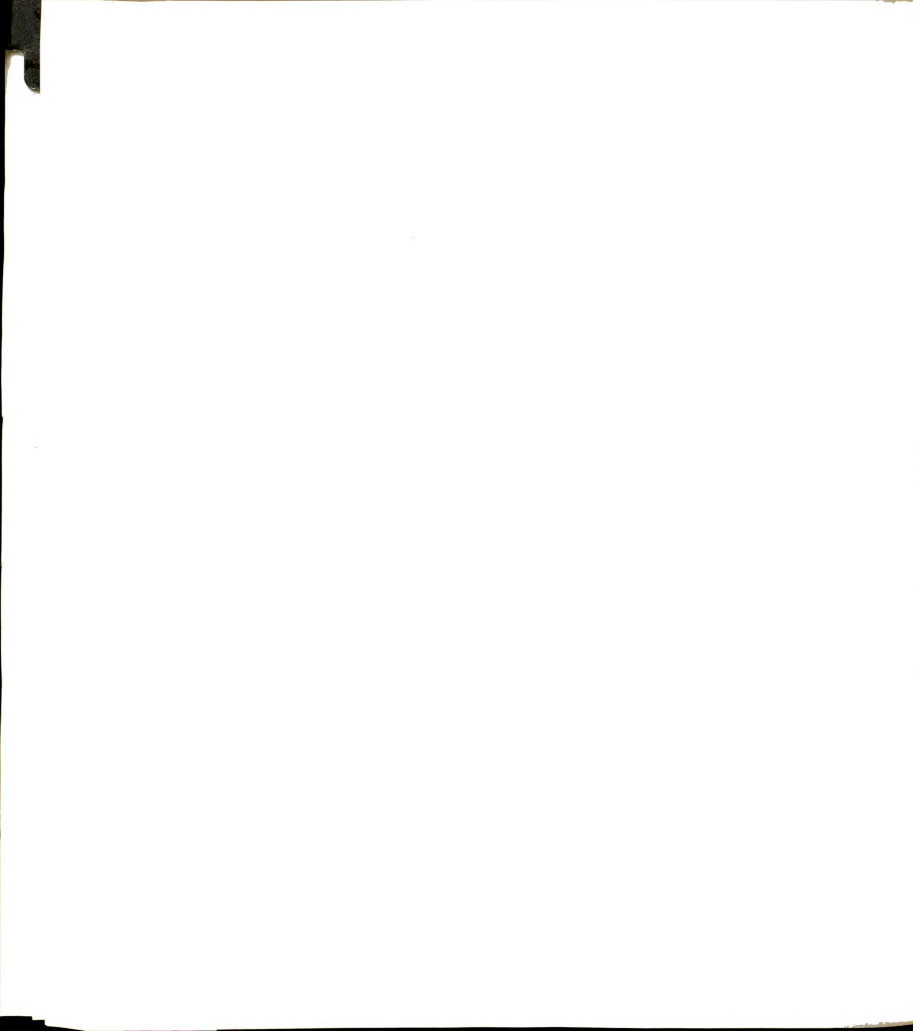
Educational Level

Table 4.9 shows the distribution of educational levels in the three factories.

Table 4.9. Distribution of Educational Level by Factories

Educational Level	<u>Factories</u>			(N)
	Containers	Construction	Bottling	
No education	28.6	2.2	3.6	20
Grade school	63.5	86.7	53.6	94
High school	7.9	11.1	42.8	22
Total	100.0	100.0	100.0	
N	63	45	28	136
$\chi^2 = 35.4 \quad df = 4 \quad p < .001 \quad N = 136 \quad \bar{c} = .617$				

The distribution of educational level among the factories could not have occurred by chance because the probability of such chance occurrence is less than one in a thousand. Further examination of the tables reveals that of those with no education 90% are in Containers, 10% each



in Construction and Bottling. Of those with grade school, 43% are in Containers, 41% in Construction and 16% in Bottling. High school education is distributed thusly: 23% each in Containers and 54% in Bottling.

Religion

Table 4.10 indicates the distribution of religion in the three main plants. Islam is the predominant religion in Nigeria but it appears to be under-represented in the sample and generally in the labor force in Nigeria.

Table 4.10. Distribution of Religion by Factories

Religion	<u>Factories</u>			N
	Containers	Construction	Bottling	
African Religion	7.8	4.4	--	5
Islam	23.8	2.2	10.7	19
Catholic	31.7	51.2	14.3	47
Protestant	39.7	42.2	75.0	65
Total	100.0	100.0	100.0	
N	63	45	28	136
$\chi^2 = 22.6$ $df = 6$ $p < .001$ $N = 136$ $\bar{c} = .480$				

The distribution of religion in the three factories is statistically significant. A little over 82% of the workers are Christians, while only about 14% are Moslems. In all, only about 4% are not attached to any of these two major religious groups. Among Christians, Protestants have a slightly higher percentage than Catholics (58% and 42%

respectively). Finally, it appears from the table that Catholics are a little over-represented in Construction while Protestants are very much over-represented in Bottling. Containers, on the other hand, maintains a fair balance among religious groups.

Mortality of Worker's Parents

The study sought to find out whether one or both parents of the worker were alive or dead and if only one were alive to ascertain which one it was. The relationship of this variable to the concept of demographic transition is discussed in Appendix A.

Table 4.11. Distribution of Mortality of Parents by Factories

Mortality of Workers' Parents	<u>Factories</u>			N	%
	Containers	Construction	Bottling		
Mother and Father alive	31.7	33.3	35.7	45	33.1
Mother alone alive	34.9	35.6	42.9	50	36.8
Father alone alive	14.3	6.7	3.6	13	9.6
Mother and Father dead	19.1	24.4	17.9	28	20.6
Total	100.0	100.0	100.1		
N	63	45	28	136	100.1

$$\chi^2 = 3.8 \quad df = 6 \quad p < .75 \quad N = 136 \quad \bar{c} = .210$$

About two-thirds of the workers have either one or both parents dead. Where only one parent is alive, there appears to be a seventy-five percent chance that it will be



the mother. This tends to indicate that as far as our sample is concerned, women seem to have a longer life expectancy than men. This problem is also further discussed in Appendix A dealing with the demographic transition theory.

2. Occupational Socialization Variables

Skill Level

The acquisition of skill implies a process of socialization into a set of normative patterns. The distribution of skill level will thus give a profile of the industrial socialization in the three main factories. The table below gives such a distribution.

Table 4.12. Distribution of Skill Level by Factories

Skill Level	<u>Factories</u>			N
	Containers	Construction	Bottling	
Skilled	42.9	77.8	10.0	64
Semi-skilled	9.5	20.0	5.0	16
Unskilled	47.6	2.2	85.0	48
Total	100.0	100.0	100.0	
N	63	45	20	128
$\chi^2 = 51.6$ $df = 4$ $p < .001$ $N = 128$ $\bar{c} = .730$				

There is a proportionately larger percentage of skilled workers in Construction than in the other two factories. Skilled and unskilled workers are fairly evenly distributed in Metal Containers while in Bottling there is a disproportionately large percentage of unskilled

workers. In the total sample skilled workers account for one-half of all the workers while unskilled workers account for about 38%.

Age of First Full-Time Employment

The age of first full-time employment is indicative of educational level and work experience. The three factories are thus compared in terms of this variable.

Table 4.13. Distribution of Age of First Full-Time Employment by Factories

Age of First Full-time Employment	<u>Factories</u>			N
	Containers	Construction	Bottling	
15 and below	5.0	2.2	--*	4
16-20	46.7	37.8	53.6	60
21-24	23.3	40.0	35.7	42
25+	25.0	20.0	10.7	27
Total	100.0	100.0	100.0	
N	60	45	28	133
$\bar{X}$ (approx.)	20.7	20.8	20.6	20.7

$$x^2 = 5.3 \quad df = 6 \quad p < .50 \quad N = 133 \quad \bar{c} = .251$$

*Where the value of the x^2 is not statistically significant, empty cells are not crucial since such empty cells only increase the value of the x^2 .

The mean ages in the three factories do not appear to be significantly different. The mean age for entry into full time employment is about 21 years.

Type of First Full-Time Employment

In addition to looking at the distribution of the age of first full-time employment we will also indicate



the distribution of the type of job that was first engaged in for full-time pay.

Table 4.14. Distribution of Type of First Full-Time Employment by Factories

Type of Job	Containers	<u>Factories</u> Construction	Bottling	N
Farming		4.8		2
Domestic Service/ General Labor	29.3	16.6	45.8	35
Industrial Work	67.3	69.0	20.8	73
Clerical Work	1.7	4.8	25.0	9
Trader	1.7	4.8	8.4	5
Total	100.0	100.0	100.0	
N	58	42	24	124
$\chi^2 = 31.2$ $df = 8$ $p < .001$ $N = 124$ $\bar{c} = .553$				

While a greater percentage of the workers in Containers and Construction got their first full-time jobs in industrial work, nearly half of those in Bottling began either as domestic servants or in general labor. On the whole, about six out of every ten workers had their first full-time job in industrial work, while about three out of every ten workers had their first full-time job in domestic service or general labor. Finally, there appear to be significant differences in the three factories in terms of the distribution of the type of first full-time job.

Number of Job Changes

The number of job changes an industrial worker has made indicates the varying kinds of differential socialization he has had. The purpose in Table 4.15 is to indicate the distribution of this variable in the three factories.

Table 4.15. Distribution of Number of Job Changes by Factories

Number of Job Changes	<u>Factories</u>			N
	Containers	Construction	Bottling	
No changes	19.1	11.1	17.9	22
1-3 changes	58.7	60.0	64.3	82
4-6 changes	20.6	24.4	14.3	28
7-9 changes	1.6	4.5	3.6	4
Total	100.0	100.0	100.1	
N	63	45	28	136
Mean number of changes	2.4	2.8	2.4	2.5
$\chi^2 = 2.8$	df = 6	p < .79	N = 136	$\bar{c} = .181$ $\bar{X} = 2.5$

There are no significant differences among the three factories in terms of the distribution of the number of job changes. The mean number of changes is about two and a half times which means that their present jobs constituted their third or fourth jobs. The slight differences in the mean job changes of the three factories may be attributed to random errors. However, those in Construction appear to have made about three job changes, their present job being the fourth.

Wages and Salaries

In Bottling, all workers are paid salaries and not wages while in Containers and Construction salaries are paid only to "staffed" workers. The mean salary for Metal Containers is 10.8 shillings (one shilling = 14 American cents) by day. Only about one out of every twelve receives a salary in this factory. Those in Metal Construction get a mean salary of about 10.4 shillings per day. The total mean wages, therefore, is about 10.6 shillings per day, or about 270 shillings (about \$29) per month. The difference of the mean wages in the two factories is not significant. The mean for all salaried workers is about 340 shillings (about \$48). Apart from those in Bottling, all other salaried workers are skilled workers. This does not mean that all skilled workers are salaried. Indeed, only about one out of every twenty skilled workers is salaried.

Person Who Found Job for the Worker

We were interested in locating the persons who found the jobs for the workers and also their relationship to the worker. In general, a little over one-half found their jobs through someone from the same village, besides immediate relatives who account for a little over one-fifth of all the jobs found. Only about one-quarter found the jobs for themselves. There are significant differences in the pattern in which jobs were found in the three

factories.¹ About 21% in Containers, 27% in Construction and 29% in Bottling found their jobs by themselves.

After excluding those who found the jobs themselves, we tried then to locate the persons who found the jobs for the remaining workers. We were interested in finding out whether or not these individuals were in the same plants as the workers. The table indicates the distribution in the three main factories.

Table 4.16. Distribution of the Location of Persons Who Found Jobs for Workers

Persons Finding Jobs for Workers	<u>Factories</u>			N
	Containers	Construction	Bottling	
In same plant	58.9	78.8	10.0	61
Not in same plant	41.1	21.2	90.0	48
Total	100.0	100.0	100.0	
N	56	33	20	109

$$x^2 = 24.3 \quad df = 2 \quad p < .001 \quad N = 109 \quad \bar{c} = .623$$

In Containers about three out of five workers are working in the same plants as those who found the jobs for them, while in Construction about four out of five are in the same plant as those who found the jobs for them. In Bottling only one out of every nine is in this category. This pattern has implications for turnover rates to the

$$^1x^2 = 34.0 \quad df = 18 \quad N = 141 \quad p < .01 \quad \bar{c} = .497$$

extent that there tend to be reciprocal patterns of relationship. Thus those who found the jobs for the workers are in a position to influence the behaviors of those for whom they found the jobs and if for any reason there is a crisis in the plant, as in the case of Construction, this could result in mass resignations or high turnover rates. On the positive side, it has the function of maintaining traditional obligatory patterns and if properly channelled could result in high esprit de corps or morale.

Aspiration Level for Sons

An open-ended question--What would you want your son to become?--was asked to tap the aspirations of the workers for their sons. Table 4.17 shows that there are no significant differences among the three main factories. However, almost eight out of ten would want their sons to be professionals.

Table 4.17. Aspiration Level for Sons by Factories

Aspiration for Sons	<u>Factories</u>			N
	Containers	Construction	Bottling	
Professional ¹	74.6	68.9	89.3	103
Factory Technician	17.5	26.7	7.1	25
Trader	4.8	--	3.6	4
Clerical	1.6	2.2	--	2
Farmer	1.6	2.2	--	2
Total	100.1	100.0	100.0	
N	63	45	28	136

$$\chi^2 = 7.5 \quad df = 8 \quad p < .50 \quad N = 136 \quad \bar{c} = .283$$

¹Professionals refer to doctors, lawyers, engineers, professors, chemists and accountants.

We could infer certain patterns of occupations and sector satisfaction from this. A relatively higher percentage (about 27%) of Construction workers would prefer their sons to be in similar jobs as themselves than Containers or Bottling workers. This could be viewed as relatively low aspiration levels for their sons, but it could also be interpreted as their satisfaction with their occupations to the point that they would want their sons to be in the same jobs. On the whole, however, a little less than one of every five would want their sons to be in similar occupations as themselves. Finally, there do not appear to be statistically significant differences in the distribution of this variable among the three factories.

Conclusion

The distributions of the background and occupational variables indicate certain patterns in the three factories, some of which are significant.

Father's occupation is randomly distributed in the factories with agriculture accounting for the occupation of about eight of every ten fathers. Containers and Construction workers have a slightly higher percentage of their fathers in agriculture than Bottling workers.

The ages of the workers follow the ages of the factories. In Containers which was established in 1940 the mean age of the workers is about 35 years while the mean age of Construction workers is about 30 years. Metal

Construction was established in 1958. In Bottling, established in 1962, the mean age is 28 years. The mean age for the entire sample is 32 years. In consonance with the age structure in the factories, there were significant differences in the marital status of the workers in the three factories. Nine of ten workers in Containers are married, while only about six of ten in Construction and four of ten in Bottling are married. Since in Nigeria polygyny is legal, marital status also involves the possibility of marriage to more than one wife. However, eight of ten workers have only one wife. Marital status is distributed unevenly in the factories. In Containers three of every four workers have one wife while in Construction about one of every twelve workers has one wife. In Bottling, only about three of five workers have one wife.

Even though a higher percentage of Containers than Bottling workers are married, Bottling workers tend to be more polygynous. This has a leveling effect on the possible number of children. Thus both Containers and Bottling have about an average of four children while Construction workers have between two or three children. The mean number of children for the sample is about three.

In terms of rural-urban background, one of every two workers in Construction has an urban background while Containers and Bottling have eight of ten and nine of ten respectively with urban backgrounds. This distribution

is reflective of the ethnic distribution in these factories. Yorubas are more urban than Ibos or other ethnic groups and there is a disproportionately large percentage of Yorubas in Bottling than in the other two factories. However, the fact that Containers was established in 1940 with very little turnover, even though there is an even distribution of Yorubas and other ethnic groups, means that most workers have spent their lives in the urban area in which the factory is established. This tended to narrow the gap in the urban background distribution between Containers and Bottling.

Construction and Bottling have slightly higher educational levels than Containers workers. The mean level of education is about seventh grade for the sample. There is also a preponderance of Christians in Construction and Bottling (93% and 89% respectively) more so than in Containers with about 71% Christians. The distribution of religion in the three factories is statistically significant. In Containers, about one of every fourth worker is a Moslem.

Some of the occupational socialization variables are distributed unevenly in the factories.

There appear to be significant differences in the distribution of skill levels in the three factories. Construction has the highest concentration of skilled workers (about 78%) while Bottling has the lowest percentage of skilled workers (10%). Containers is in between with 43%.

There seem to be no differences in the ages of first full-time employment in the three factories but there are significant differences in the types of jobs that the workers in the different factories first had. The mean age of first full-time employment is about 21 years. However, about seven-tenths of Containers and Construction workers started with industrial work while about half of Bottling workers began as domestic servants or general laborers. There does not appear to be any difference in the number of job changes that the workers have made. The mean number of changes is about three times.

Only about one-fifth found their jobs themselves. Of the four-fifths whose jobs were found for them by others, about four-fifths of Construction workers are working in the same plants as those who found the jobs for them. Three-fifths of Containers and one-tenth of Bottling workers are in this category. This has implications for worker-morale or the lack of it. The distribution of this variable in the three factories is statistically significant.

Finally, when aspirations for sons are compared in the three factories, there is no difference in the distribution. However, about eight of every ten workers would want their sons to be in professional occupations. Among Construction workers, however, three-tenths would want their sons to have the same occupations as themselves. This is compared to one of five for Containers and one

of ten for Bottling workers who would want their sons to be in the same occupations as themselves.

This represents a composite picture or profile of the three factories. The next step will be to investigate the profile of the workers by correlating some of the background and occupational socialization variables.

3. Interrelationship of Demographic and Occupational Socialization Variables

Father's occupation was not found to be related to rural-urban background.¹ However, about 70% of those whose fathers are in agriculture have urban background as compared to 73% of those whose fathers are in non-agricultural occupations. Furthermore, father's occupation is not related to education.² On the other hand, this variable is significantly related to skill level.³ About 65% of those who are unskilled have their fathers in agriculture. This appears to be the only variable with which father's occupation is correlated. It is correlated neither with age of son's first entry into the job market, nor with the type of occupation.

Age is positively related to marital status⁴ with

¹ X ² = 2.50	df = 10	p < .999	N = 134	$\bar{c}$ = .160
² X ² = 20.50	df = 20	p < .35	N = 134	$\bar{c}$ = .403
³ X ² = 81.58	df = 20	p < .001	N = 134	$\bar{c}$ = .680
⁴ X ² = 57.64	df = 14	p < .001	N = 141	$\bar{c}$ = .641

the higher percentage of the older workers married. Indeed, about 96% of all those thirty-one years and over are married, while only about 42% of those under thirty-one years are married. There is no relationship between age and the number of wives a worker has. Age is also positively related to the number of children a worker has.¹ Older workers have more children as is to be expected. Age is also positively related to urban background.² Of those 31 years and over 83% are of urban background while 62% of those under 31 years are of urban background. Age is negatively correlated with education.³ Of those thirty-one years or younger, all of them have eight years or more of education, while only 37% of those over thirty-one have eight years or more education. Age was not related to skill level.⁴ Age is not related to wages. This is so because wages follow not only length of service but also skill level. Age was also not found to be related to aspiration for sons.

Urban background appears not to be related to skill level.

$$r = +.543 \quad \begin{matrix} {}^1X^2 = 33.63 \\ df = 12 \\ p < .001 \\ N = 90 \\ \bar{c} = .623 \end{matrix}$$

$$r = +.420 \quad \begin{matrix} {}^2X^2 = 36.93 \\ df = 14 \\ p < .001 \\ N = 141 \\ \bar{c} = .541 \end{matrix}$$

$$r = -.617 \quad \begin{matrix} {}^3X^2 = 90.31 \\ df = 28 \\ p < .001 \\ N = 141 \\ \bar{c} = .679 \end{matrix}$$

$$r = -.165 \quad \begin{matrix} {}^4X^2 = 36.02 \\ df = 28 \\ p < .15 \\ N = 141 \\ \bar{c} = .490 \end{matrix}$$

However, there is one incipient trend in which younger workers, under 35 years, have a larger percentage of skilled workers than those over 35 years.

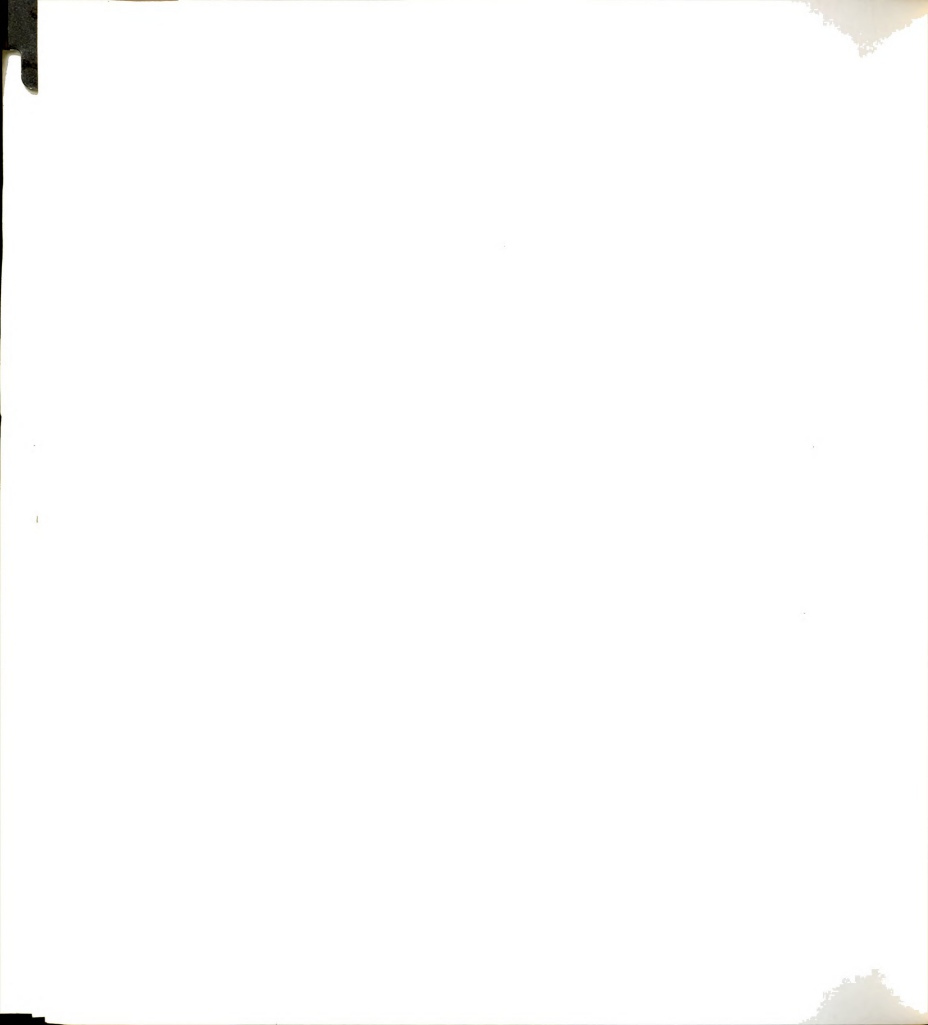


Table 4.18. Distribution of Skill Level by Urban/Rural Background

Rural-Urban Background	Skill Level			Total	(N)
	Skilled	Semi-skilled	Unskilled		
Urban	46.0	10.0	44.0	100.0	(91)
Rural	26.3	18.4	55.3	100.0	(38)
Total (N)	(52)	(16)	(61)		129
$\chi^2 = 4.9$ $df = 2$ $p < .08$ $N = 129$ $\bar{c} = .280$					

Of those who are skilled a little over eight out of ten are of urban background. Though the relationship in Table 4.18, between skill and rural-urban background is not statistically significant, one could see an incipient pattern where those of urban background are relatively more skilled than those of rural background.

Urbanity is positively related to age¹ and negatively to education.² Age and education are negatively related³ because the younger workers are more educated and are also recent migrants to urban areas. Education is not related to skill level but is significantly related to the number of wives a worker has.

$$r = +.420 \quad \begin{matrix} {}^1\chi^2 = 39.93 & df = 14 & p < .001 & N = 141 & \bar{c} = .544 \end{matrix}$$

$$r = -.329 \quad \begin{matrix} {}^2\chi^2 = 24.82 & df = 8 & p < .009 & N = 141 & \bar{c} = .478 \end{matrix}$$

$$r = -.617 \quad \begin{matrix} {}^3\chi^2 = 90.31 & df = 28 & p < .001 & N = 141 & \bar{c} = .679 \end{matrix}$$

Table 4.19. Distribution of Number of Wives by Educational Level

Number of Wives	<u>Educational Level</u>		N
	No Education	Some Education	
One	55.0	81.6	73
Two or more	45.0	18.4	23
Total	100.0	100.0	
N	(20)	(76)	96

$$\chi^2 = 6.14 \quad df = 1 \quad p < .025 \quad N = 96 \quad \bar{c} = .385$$

Of those who have one wife about 85% have some education while only about 15% have no education.

A number of the variables in this chapter are included to inform and sensitize the reader to the characteristics of the labor force. They are, in effect, a mine of information for further studies in Nigeria.

CHAPTER V

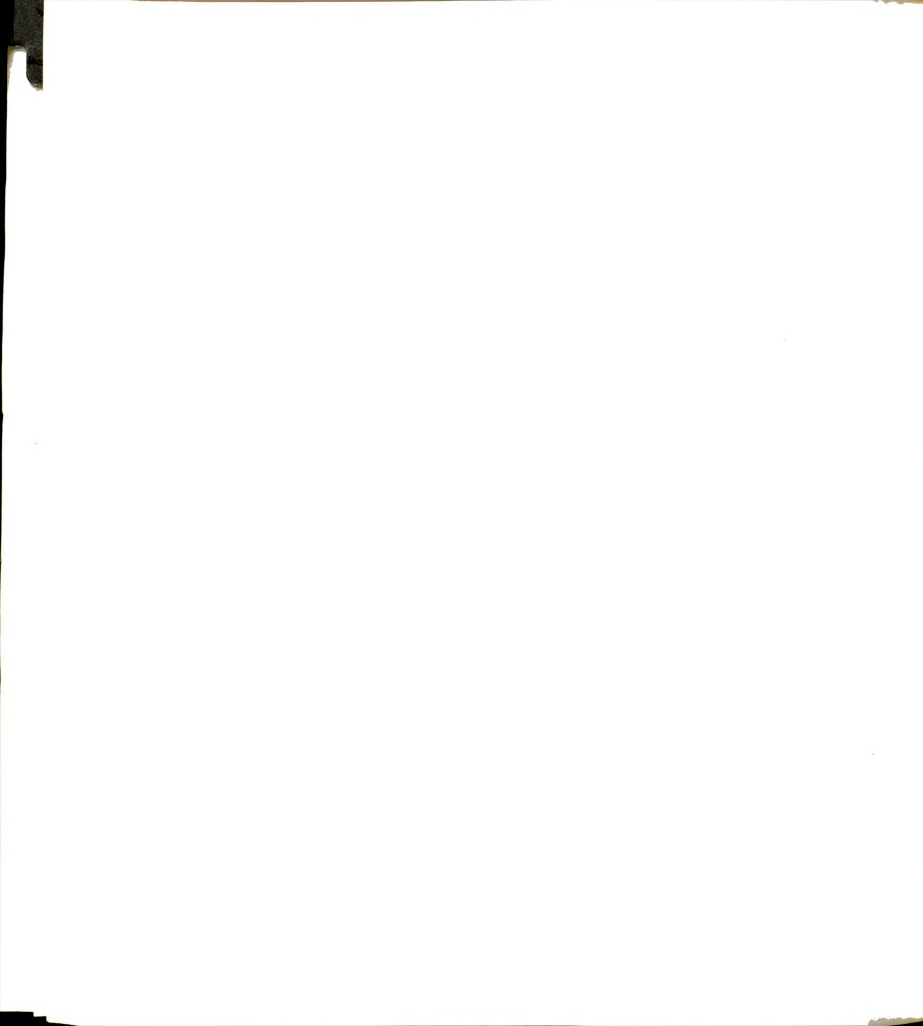
ANALYSIS OF DATA [2]

Introduction

The primary organizing hypothesis for this study is that industrial satisfaction is related to reference group comparison. As indicated in Chapter I, industrial satisfaction is not a singular concept but derives from different arenas of social activity. Accordingly, the analysis of the data will deal with the three selected arenas of sector, occupation, and work, and the significance of reference group comparisons in inducing satisfaction in each of these three arenas. In addition to reference group, other variables such as skill level, rural-urban background, work-control, etc., are used to indicate how much of worker satisfaction can be predicted by them independently.

With regard to the major hypothesis, it is pertinent to point out that, in adumbrating causal connections, since both the dependent variable (worker satisfaction) and the independent variable (reference group comparison) are attitudinal variables,¹ it is possible for either of

¹It should be pointed out that these variables are not ipso facto psychological variables because the perception occurs within structural contexts, to wit, the structural context of the reference group.



them to be used as a dependent or an independent variable. One way of solving the dilemma is by a longitudinal study. The other approach which we have chosen in this study, in lieu of such longitudinal studies, is to rely on structural factors in a theoretical sense. In a relatively undifferentiated society, status categories tend to be more visible, thereby having the influence of making individuals more prone to using such categories for invidious comparisons irrespective of the intrinsic satisfactions they derive from performing the functions related to such status categories. In addition, even if we knew that certain attributes of a status are used in determining one's specific location in the status hierarchy of one's reference group, this will not tell us the satisfaction that one derives from the general status whose attributes have produced such a location. Our contention in using reference group as an independent variable is precisely the fact that even though status attributes are important in reference group comparisons, it is the comparison per se that induces satisfaction with the occupation of such a status. This constitutes the primary justification for our use of reference group as an independent variable.

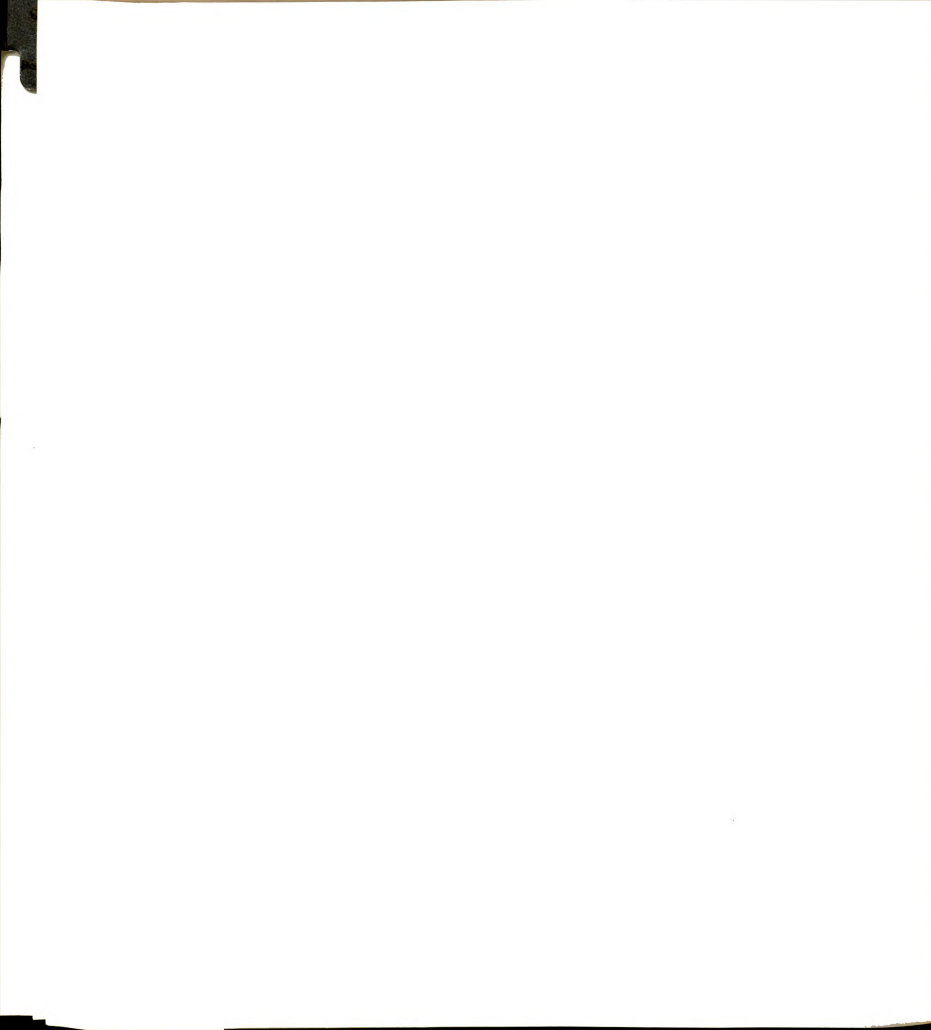
Furthermore, in a causal sequence, the independent variable, the predictor, must logically occur before the dependent variable, the state of affairs predicted. One trend of argument holds that since skill level which

represents occupational mobility is correlated with satisfaction, skilled workers would feel, in greater proportions, that they are better off than members of their reference group and that it is the skill level and the concomitant satisfaction that will induce or cause (?) a more favorable evaluation vis-a-vis reference group members. Our data do not support this point of view. What our data indicate is that it is reference group comparison that produces satisfaction and not the other way round. Skill level was found not to be related to reference group comparison.¹ In the light of this lack of relationship between skill level and reference group comparison, we feel justified in using reference group comparison as the independent variable.

1. Industrial Workers and Sector Satisfaction

The choice of a particular sector of social and economic activity is conditioned, in developing economies, by a whole set of factors among which are the diminishing returns on land and therefore the release of the surplus labor to work in industries, the desire for urban residence, the desire to make "fast" money and so on. In Nigeria,

¹ Service Reference Group Comparison and skill level;
 $\chi^2 = .3$ $p < .40$ $df = 1$ $N = 93$
 Agricultural Reference Group Comparison and skill
 level; $\chi^2 = 4.0$ $df = 2$ $p < .85$ $N = 85$
 Occupational Reference Group Comparison and skill
 level; $\chi^2 = 1.3$ $df = 1$ $p < .25$ $N = 128$.



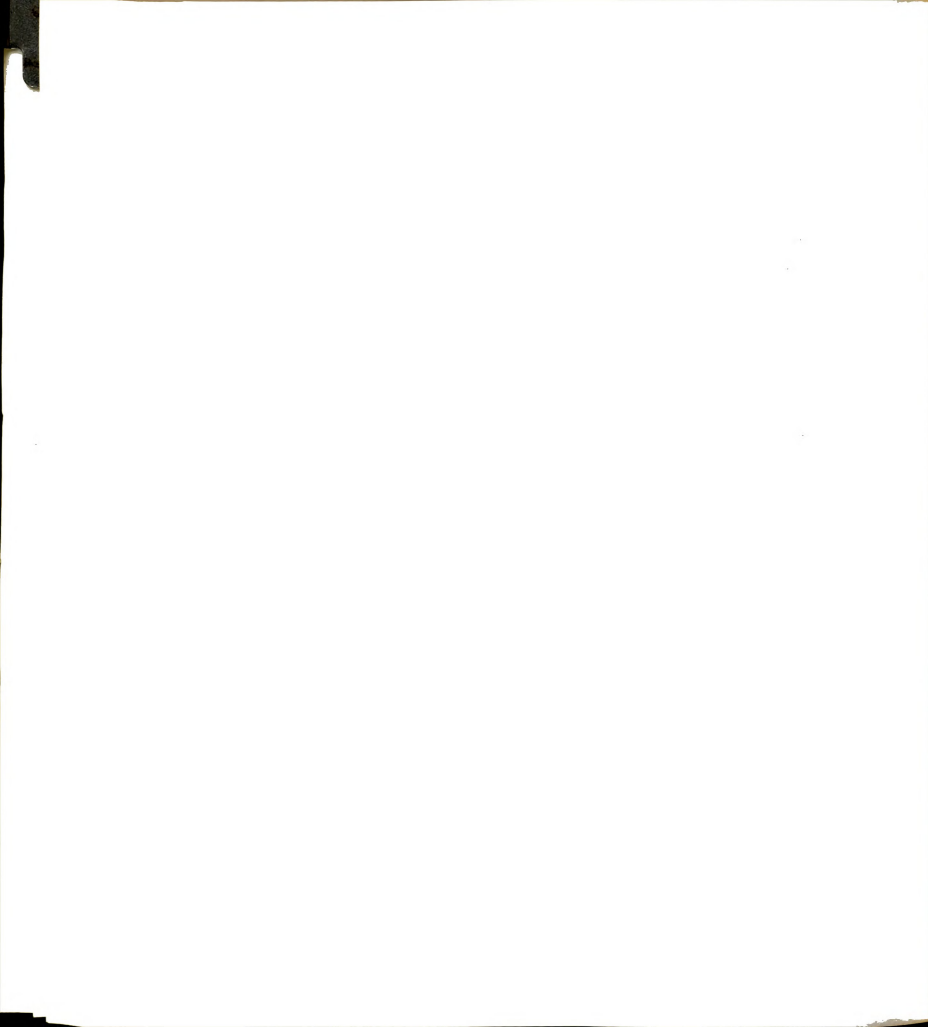
land is owned by the family and no single member of the family has the right to dispose of land without the prior consent of the whole family. As Dr. Elias states:

The Nigerian conception of the ownership of land was summed up by one of our chiefs speaking to the West African Lands Committee in 1912 . . . 'Land belongs to a vast family of which many are dead, few are living and countless numbers are yet unborn.' Throughout Nigeria the ownership of land is in the hands of the family, hardly ever the individual.¹

Thus, as family size increases, land segmentation also increases, thereby decreasing the productivity of land. Thus, the push factor induces people to move to urban areas for employment. There are also those who have spent most of their lives in urban areas and thus get absorbed into urban employment. Furthermore, there are those in rural areas who perceive the industrial sector as conferring more prestige and are thus pulled into industrial employment. Finally, there are those, mostly target workers, who enter industrial employment to make some "fast" money to take back to the farm or rural areas to consume, possibly conspicuously.

However, for whatever reason a person enters a particular sector, his satisfaction with that sector is conditioned by how he perceives the members of his reference group to be doing, as compared to himself. Thus the

¹T. O. Elias, The Impact of English Law on Nigerian Customary Law (Lugard Lectures) (Lagos: CMS (Nigeria) Press, 1958), p. 15.



general hypothesis here is that: Satisfaction with the sector is related to the perceived position of reference group members in other sectors. Specific hypotheses derive from this:

1. Satisfaction with the industrial sector is related to the perceived comparison with reference group members in the agricultural or service sectors.
- 1a. Those industrial workers who perceive members of their reference group in the agricultural sector to be on the whole better off than they are, will be on the whole less satisfied with their sector than those who perceive members of their reference group in the agricultural sector to be on the whole worse off than they are.
- 1b. Those industrial workers who perceive members of their reference group in the service sector to be on the whole better off than they are, will be on the whole less satisfied with their sector than those who perceive members of their reference group in the service sector to be on the whole worse off than they are.

In order to establish reference group, respondents were asked to define those with whom they compared themselves usually. The question used was: "Name six people with whom you always compared yourself." In order to probe patterns of group relations between the respondent and the six named, another question was asked:

"How related are these six to you? Same age, same village, live near in city, passed through elementary school at the same time, passed through secondary school (high school) at the same time."

The distribution is as follows:

	<u>Percent</u>	<u>N</u>
a. Same age	92	140
b. Same village	92	141
c. Live near in city	65	141
d. Passed elementary school same time	77	140
e. Passed secondary school same time	12	141

N = 705

The pattern that emerged from this was that those selected as reference group members are the same age, come from the same village, went to elementary school together and live near in city. Reference group members may be said to be also peer group members. Thus, in line with Chapman and Volkmann, these are also people whose status and ability, relative to his own, the industrial worker can assess.¹ That is, they are from the same or similar social background.

An attempt was made to tap sector preferences. Two questions were asked to tap this:

"With the same annual or monthly income, which of these would you prefer: farming, factory work, trade, clerk?"²

and

"Have you ever thought of changing your job?-- Never, sometimes, always. If you have thought of changing your job, to which of these would you want to change: farming, industrial work, trade, clerk?"

These questions, particularly the first, were designed to minimize economic and other differences among sectors and they were also widely separated so as to avoid a halo effect.³ Furthermore, one question serves as a check on the

¹Chapman and Volkmann, op. cit.

²The additional category of clerk or office work was introduced to help account for the preference for clean or dirty jobs. It refers to desk jobs in the civil service, industry or service.

³The first question was question #37, while the second was #67. Thus, there were thirty other questions separating the two.



other for consistency in responses and thereby a test of the reliability of the instrument used.

The responses to the first and second questions, dealing with sector preference, are distributed as follows:

Table 5.1. Distribution of Marginals of Sector Preference for Two Questions

Sectors Preferred	First Question* Percent (N)	Second Question* Percent (N)
1. Farming/Agriculture	7.0 (10)	5.0 (6)
2. Factory/Industrial	44.0 (62)	33.0 (46)
3. Trade/Service	45.0 (63)	34.0 (47)
4. Clerk/Office Work ¹	4.0 (2)	7.0 (10)
5. No Change	--	21.0 (29)
Total (N)	100.0 (137)	100.0 (138)

*See page 148.

The relationship between the responses to these two questions is statistically significant as indicated in Table 5.2. This indicates a significant degree of consistency in the responses.

The only major differences between the distribution of the first question and the second question seem to be between agriculture and clerical work which appear to have

¹The low preference for clerical work (about 5.5%) would tend to indicate a pattern which would dispel the notion current in many intellectual and management circles in Nigeria that most Nigerian industrial workers are not willing to soil or dirty their hands with factory work.

switched places. The difference between factory and trade still remains the same. Such a distribution gives reliability to the instrument.

Table 5.2. Relationship of Two Questions on Sector Preference

Question #1*			Question #2*		Total	(N)
	Farm	Factory	Trade	Clerk		
Farm	37.5%	12.5%	12.5%	37.5%	100.0%	(8)
Factory	--	93.5%	6.5%	--	100.0%	(46)
Trade	2.1%	33.3%	58.3%	6.3%	100.0%	(48)
Clerk	50.0%	--	50.0%	--	100.0%	(2)
Total (N)	5	60	33	6		(104)

*See page 148.

We may conclude from the distribution on Table 5.2 that most industrial workers in Nigeria prefer the industrial and service sectors relatively equally but prefer the industrial over and above both agricultural and clerical work.

These represent gross figures. When, however, sector preference is computed with such variables as rural-urban residence, skill level and wages, a pattern begins to emerge. Thus, as data in Table 5.3 indicate, among those of urban background, a little less than one-tenth chose agriculture, about two-fifths chose industry and over half chose service or trade. Of those of rural background, one-twentieth preferred to be in agriculture,

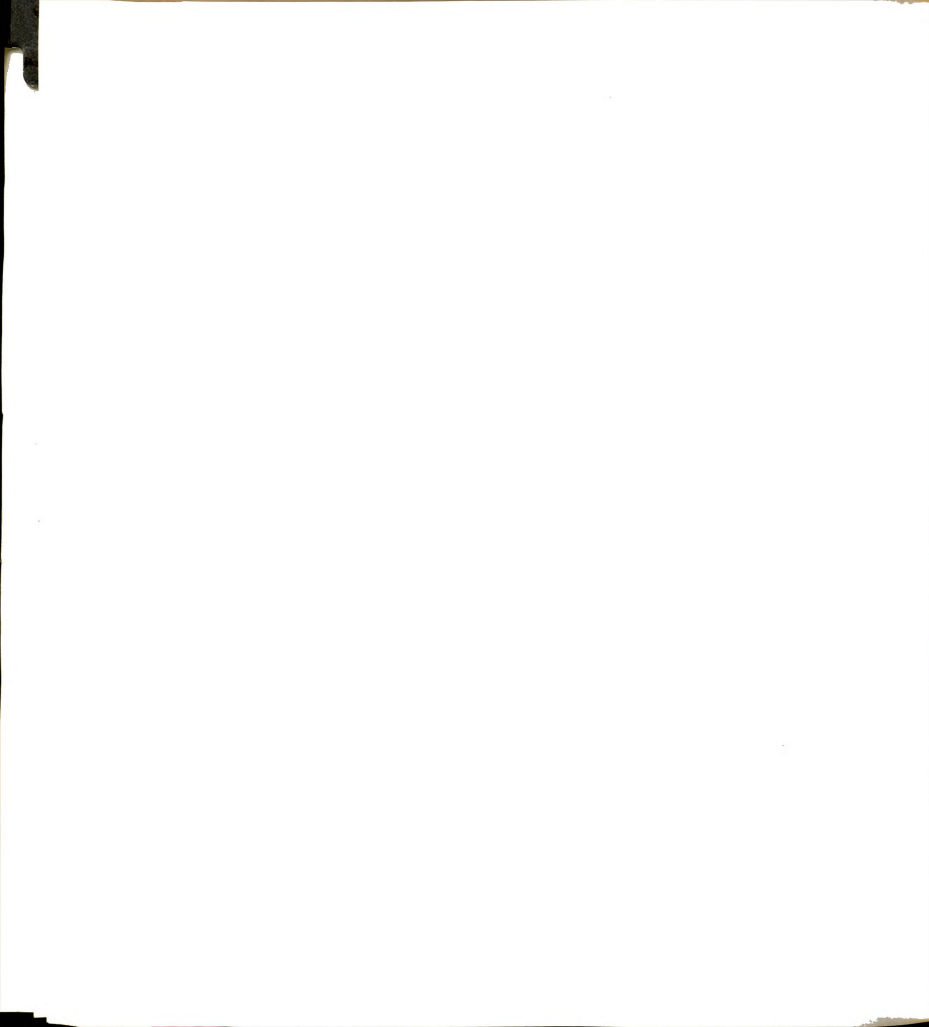
seven-tenths in industry and a little more than one-quarter in service.

Table 5.3. Sector Preference and Rural-Urban Residence

Urbanity	<u>Sector Preference</u>			Total	(N)
	Agriculture	Industry	Service		
Urban	8.2	36.7	55.1	100.0	(98)
Rural	5.1	66.7	28.2	100.0	(39)
N	10	62	65		137

$$\chi^2 = 10.15 \quad df = 2 \quad p < .01 \quad N = 137 \quad \bar{c} = .384$$

Urbanity is one of those difficult concepts to delineate since it involves not only the number of years an individual has lived in an urban area, but also the previous rural or urban socialization the individual has had. Thus, it is difficult to compare the urbanity of an individual who is thirty years old and has spent fifteen years in an urban area, with a twenty-year old individual who has also spent fifteen years in an urban area. There are the problems of countervailing rural forces in the socialization process. This difficulty led us to use the area where the respondent has spent more than half of his life. If he has spent more than half of his life in a rural area, he is defined as rural; and, if he has spent more than half of his life in an urban area, he is defined as urban. We recognize the difficulties inherent in this approach, but we chose it mainly because it tends to bring to focus the



effects of differential patterns of socialization.

The finding is significant in many respects and lends itself to interpretation. Rural or urban background is not significantly related to the rejection of the agricultural sector. However, more of those with rural background chose industry than those of urban background (66.7% and 36.7%), while those of urban background preferred service to those of rural background (55.1% and 28.2%). Industrial sociologists argue that in a mature industrial society, service or non-manufacturing industries predominate and a majority of those employed in the labor force have been born in urban areas.¹ Thus, this tendency of those with urban background to prefer the service sector may be attributed to an incipient pattern of industrial socialization.

There is also another factor operating here. Those of rural background are generally more likely to be less familiar with service industries and particularly with their operations. These are not just the agriculture-linked services but those functionally related to industries--those dealing with the export-import market. Thus, their relative unfamiliarity with the service sector will tend to preclude those of rural background from meaningful social linkages to be able to compare themselves. Above all,

¹Miller and Form, op. cit., p. 39.

movement into urban industrial employment carries with it some prestige factors not only because these people are better able to earn and discharge their traditional obligations, but the neon light of an urban employment carries some degree of sophistication and pride.¹

A corollary to this would be the reasons why industrial workers in Nigeria would prefer any of the sectors they chose. The distribution of the reasons for sector preference was as follows:

Table 5.4. Urbanity and Reasons for Sector Preference

Urbanity	Reasons for Sector Preference					(N)
	Money	Responsi- bility	Respect	Inde- pendence	Total	
Urban	30.4	26.1	23.2	20.3	100.0	(102)
Rural	13.9	15.3	41.7	29.1	100.0	(39)

$$\chi^2 = 11.20 \quad df = 3 \quad p < .02 \quad N = 141 \quad \bar{c} = .372$$

It is significant from this table that those of rural background preferred their sector of choice primarily because of the prestige it will give them and, secondarily, because of the independence they will get. This independence

¹George Balandier, "Urbanism in West and Central Africa: The Scope and Aims of Research," in International African Institute, Social Implications of Industrialization and Urbanization in Africa South of the Sahara (prepared under the auspices of UNESCO; Paris: UNESCO, 1956), pp. 495-510. Also see "Town Planning," a report given at the 2nd session of the Inter-African Conference on Housing and Urbanization, CCTA/CSA L. (59), p. 23, Nairobi, Feb. 13, 1959 (Mimeographed).

may be interpreted as the freedom from immediate kinship and agricultural ties which will enable them to organize their lives independently. It involves independence of choice and of action. Those of urban background selected their sector primarily because of financial gains and, secondarily, because of the responsibility it will offer them. The implication here is that those of urban background have already been used to the prestige and independence the sector will offer them and are more pragmatic in terms of the tangible gains such as money and greater responsibility that the sector will bestow on them. One may assume from this that as the industrial workers become more urbanized, they become less idealistic in terms of their expectations and become more pragmatic. Financial inducements will therefore be more meaningful to such workers than the sheer glory of being in the industrial work world.¹

Sector preference is also related to skill level and furthermore to repetitive and non-repetitive work. However, urbanity was not found to be related to skill

¹When reasons for the choice of a sector were correlated with sector preference, it was found that money and independence accounted for the choice of the service sector (72.41% and 51.43%, respectively). Responsibility and prestige account for the choice of the industrial sector (75.00% and 50.00%, respectively), and money and responsibility accounted for the choice of the agricultural sector (10.34% and 10.53%, respectively). Reason for the choice of sector was used as the independent variable here.

level.¹ That is, an urban person is as likely to be skilled or unskilled as another of rural background. First, we will deal with sector preference and skill level, and then interpret the data.

Table 5.5. Sector Preference and Skill Level

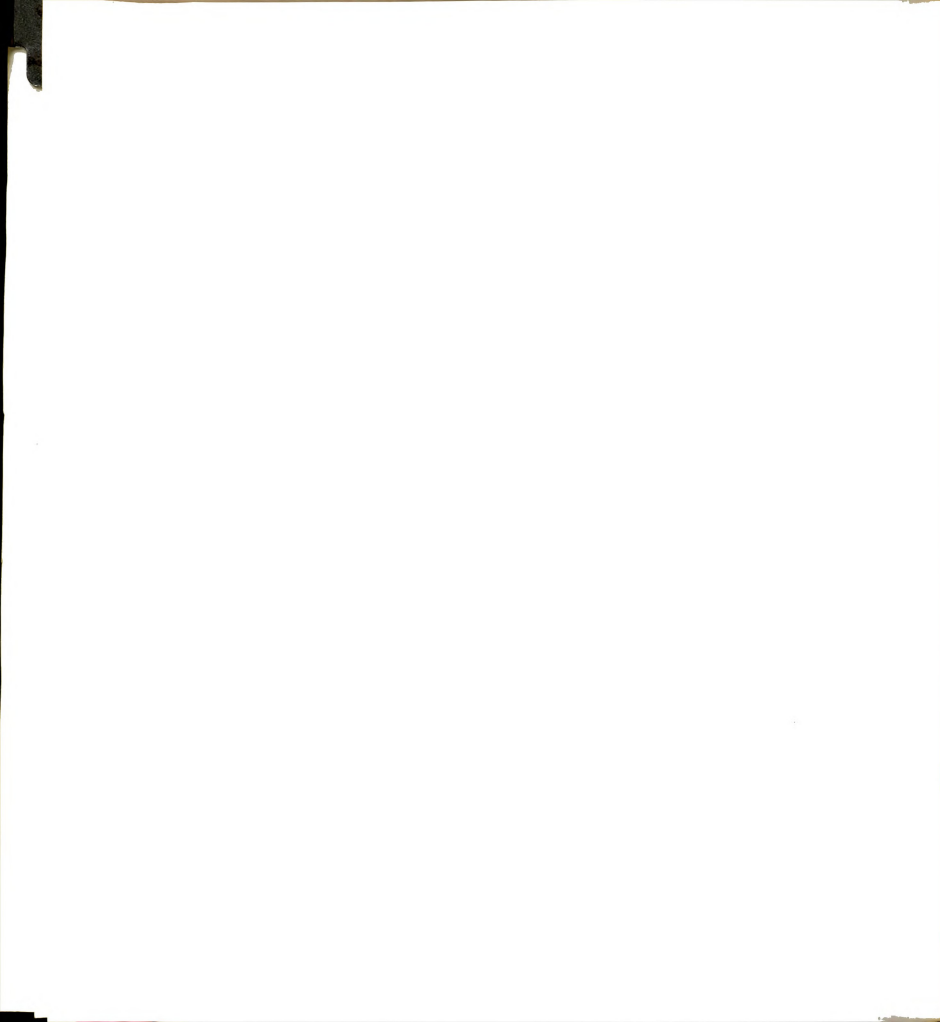
Sector Preference	<u>Skill Level</u>		
	Unskilled	Semi-skilled	Skilled
Agriculture	13.5	6.3	1.6
Industry	15.4	68.7	68.9
Service	71.1	25.0	29.5
Total (N)	100.0 (52)	100.0 (16)	100.0 (61)

$$\chi^2 = 39.1 \quad df = 4 \quad p < .001 \quad N = 129 \quad \bar{c} = .640$$

These categories could be further collapsed into a two-by-two contingency table and the relationship becomes clearer.

Table 5.6 shows that skill level is significantly associated with the choice of sector as skilled and semi-skilled workers are more likely to select the industrial sector than unskilled workers. The significance of this can be seen when we look at those who have selected the various sectors. For example, about four-fifths of those who selected agriculture are unskilled workers with the remaining one-fifth distributed evenly between semi-skilled

¹See reasons adduced in Chapter IV, pp. 141-42, to account for this discrepancy.



and skilled workers. Furthermore, about 70% of those who chose industry are skilled workers, with 18% semi-skilled and 12% unskilled. Of those selecting service, a little over 60% are unskilled workers, with 31% skilled workers and about 9% semi-skilled workers. One can conclude from these that the higher the skill level, the greater the chance that the worker will select the industrial sector. This leads to the general statement that industrial adaptation or commitment increases with skill level.

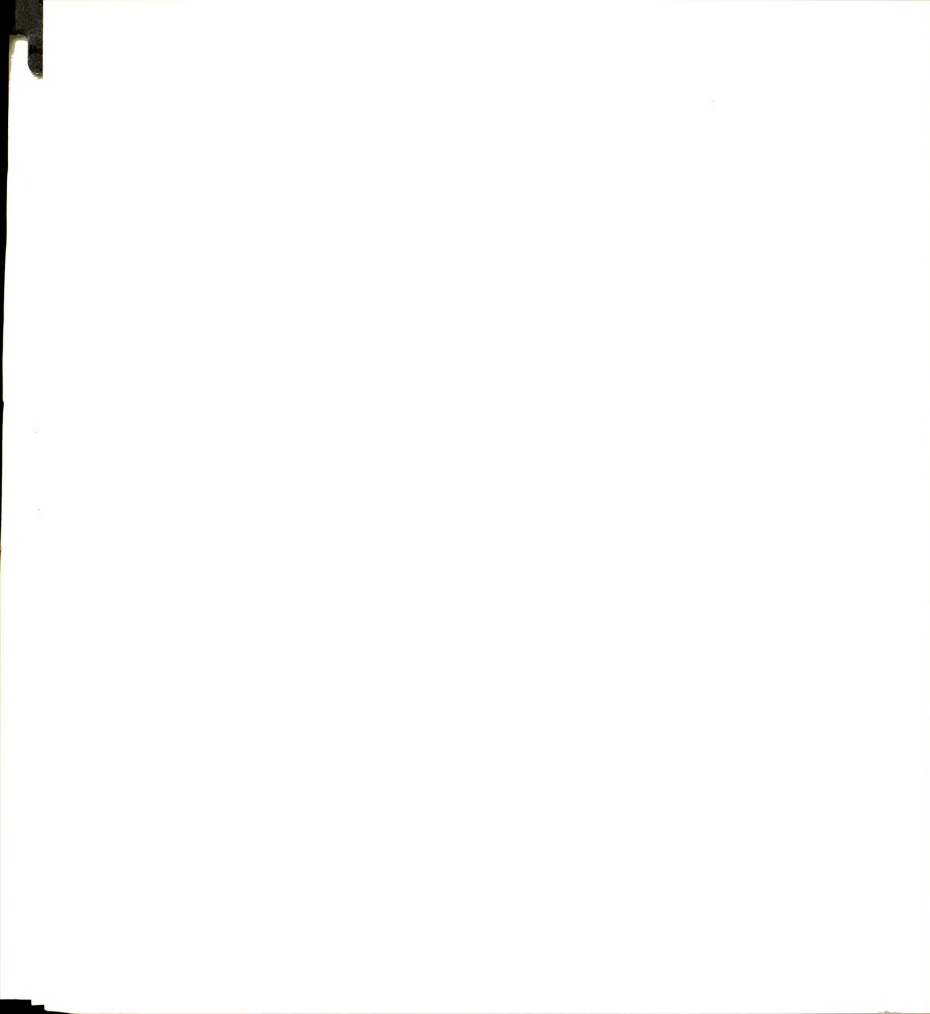
Table 5.6. Sector Preference and Skill Level

Sector Preference	Skill Level	
	Unskilled	Skilled
Non-Industrial	84.6	31.2
Industrial	15.4	68.8
Total	100.0 (52)	100.0 (77)

$$\chi^2 = 35.6 \quad df = 1 \quad p < .001 \quad \bar{c} = .730 \quad N = 129$$

Skill level is significantly associated with wages, and wages, on the other hand, are significantly related to sector preference. Skill level was found to be significantly associated with degree of repetitive/non-repetitive work even though degree of repetitive work/non-repetitive work does not appear to be associated with sector preference.¹ The table below gives the association of skill level

$$^1\chi^2 = 4.7 \quad df = 2 \quad p < .09 \quad N = 129 \quad \bar{c} = .273$$



to degree of repetitive/non-repetitive work.

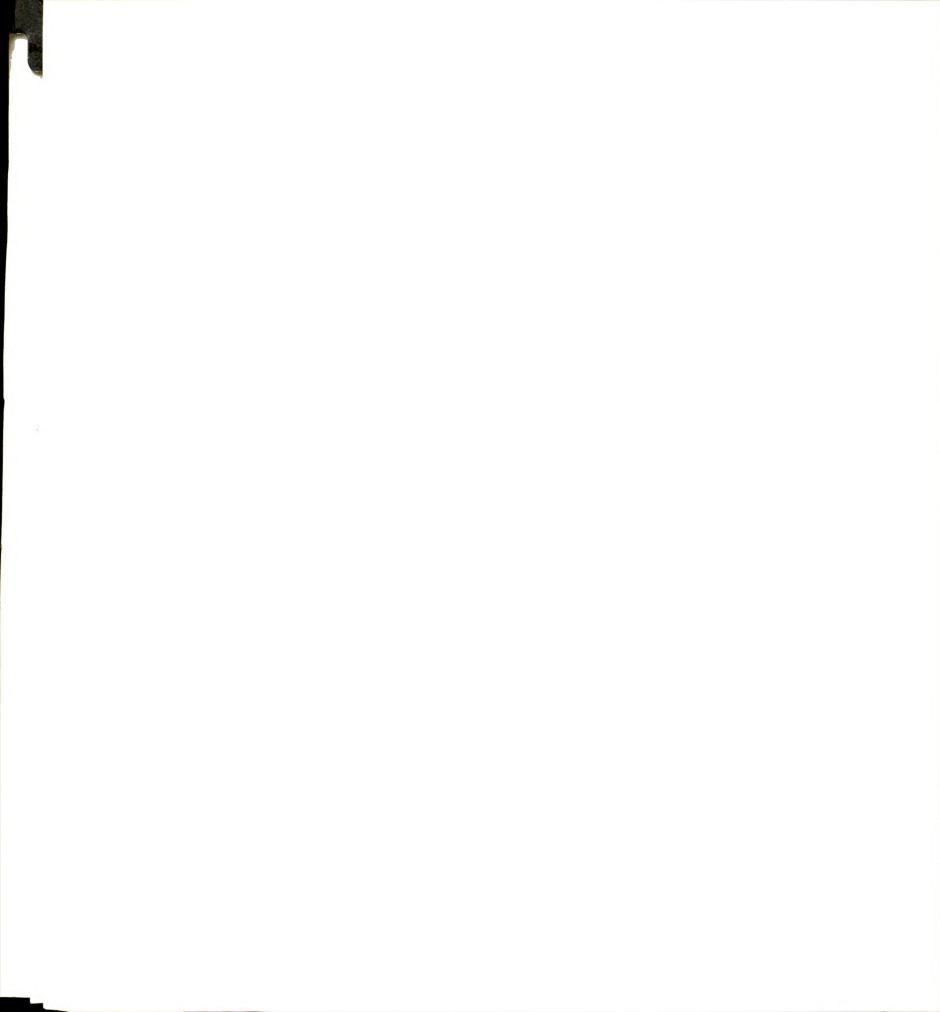
Table 5.7. Association of Skill Level with Repetitive/Non-Repetitive Work

Skill Level	Degree of Repetitive Work			(N)
	Repetitive	Non-Repetitive	Total	
Skilled	39.0	61.0	100	(61)
Semi-skilled	37.5	62.5	100	(16)
Unskilled	80.8	19.2	100	(52)

$$\chi^2 = 21.8 \quad df = 2 \quad p < .001 \quad N = 129 \quad \bar{c} = .556$$

Table 5.7 indicates a slightly higher, though not significant, percentage of semi-skilled workers in non-repetitive work. However, when we focus on those who are in non-repetitive work, about 65% are skilled workers, and only 33% of those in repetitive work are skilled. A preponderantly large percentage of unskilled workers are performing repetitive work. Eight of every tenth unskilled worker are in repetitive work.

The finding of the association of skill level and sector preference is to be expected to the extent that skilled workers are more socialized into the normative patterns of industrialization and, more importantly, since skill is a relatively scarce commodity in developing societies, pay, prestige, responsibility, etc., that accrue to it are relatively much greater than in mature, industrial societies where skill is relatively abundant. Thus, skilled workers are expected to prefer the industrial to



the non-industrial. The relatively large percentage of skilled workers preferring non-industrial sectors can be accounted for by those who preferred service.

Even though urbanity and skill level are predictive of sector preference, it might also be worthwhile to examine the sector of employment of the worker's father, which may indeed exert some impact on sector preference. That is, we are dealing with the preferences that derive from early socialization due to the sector of work of the father of the worker. As would be expected in a developing society where industrial experience is relatively recent, a majority of the industrial workers have their fathers in the agricultural sector. The distribution is as follows:

<u>Father's Sector of Employment</u>	<u>Percent</u>
Agriculture	69.1 (85)
Industrial	12.2 (15)
Service	13.8 (17)
Office Work	<u>4.9</u> <u>(6)</u>
Total (N)	100.0 123

When father's sector of employment is computed with the sector preference of the child, we obtain this pattern of distribution:

Table 5.8. Father's Sector of Employment and Child's Sector Preference

Child's Sector Preference	Father's Sector of Employment			
	Agriculture	Industry	Service	Office
Agriculture	10.6	--	--	--
Industry	40.0	53.3	52.9	83.3
Service	48.2	40.0	47.1	16.7
Office	1.2	6.7	--	--
Total	100.0	100.0	100.0	100.0
N (123)	85	15	17	6

$$\chi^2 = 12.6 \quad df = 9 \quad p < .20 \quad \bar{c} = .364 \quad N = 123$$

Table 5.8 indicates that, of those whose fathers are in agriculture, a little less than half preferred service and only about one-tenth chose agriculture. However, significantly larger proportions (over one-half in each case) of those whose parents are in non-agricultural sectors, selected the industrial sector. Indeed, when we look at the characteristics of the sector preferences, we observe that all of those who selected agriculture have their parents employed in the agricultural sector. Of those who selected the industrial sector, 61% have their parents in agriculture, 16% in industry, 14% in service, and 9% in office work. Finally, of those who chose service, 73% have their fathers in agriculture, 14% in industry, 11% in service, and only 2% in office work.

However, when the categories are collapsed into

agricultural/non-agricultural, as in Table 5.9, a significant relationship emerges where there is a greater likelihood of those whose parents are in non-agricultural sectors preferring the industrial sector, and those whose parents are in the agricultural sector selecting that sector. Thus, those who prefer agriculture are more likely to be those whose parents are in agricultural than in non-agricultural sectors. The distribution is as follows:

Table 5.9. Father's Sector of Employment and Child's Sector Preference (Collapsed)

Child's Sector Preference	Father's Sector of Employment	
	Agricultural	Non-Agricultural
Agricultural	10.6	0.0
Non-Agricultural	<u>89.4</u>	<u>100.0</u>
Total	100.0	100.0
N (123)	85	38

$$\chi^2 = 4.4 \quad df = 1 \quad p < .03 \quad \bar{c} = .292$$

Reference Group Behavior and Sector Satisfaction

Sector preference does not by itself necessarily indicate an attitude of satisfaction or dissatisfaction toward corresponding sectors of activity. In order to tap responses to our major hypothesis with regard to reference group behavior and sector satisfaction, four questions were asked, two dealing with reference group members in agriculture and two with those in service.

"When you compare yourself with members of your mates¹ who are farmers, do you think that on the whole you are:

- a. Better off than all of them?
- b. Better off than most of them?
- c. Doing as well as they are?
- d. Most of them are better off than you are?
- e. All of them are better off than you are?" (Question 41)

The responses to this question were collapsed into three categories (i.e., (a) and (b), (c), (d) and (e)), but because of empty cells in the middle category they were finally collapsed into two categories of better off and worse off.

To tap sector satisfaction, the following question was asked:

"When you compare yourself today as an industrial worker, do you feel:

- a. More satisfied working in industries than your mates who are in the agricultural sector?
- b. Less satisfied working in industries than your mates who are in the agricultural sector?"²
(Question 45)

The distribution of the two variables is shown in Table 5.10.

¹Reference group is a technical term which was found in the pretest to be meaningless to the workers. A synonym more generally used in Nigeria was therefore adopted. The synonym is mate. Thus, here and in all other sections where reference group is used, mate may be substituted. There appears to be no difference.

²This represents a collapsed form of the original question which was worded like the previous question originally. All other related questions were collapsed in this way.

Table 5.10. Industrial Sector Satisfaction and Perceived Comparison with Reference Group Members in Agricultural Sector

Comparison with Reference Group in Agriculture	Industrial Sector Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Respondent Better Off	78.6	21.4	100.0	42
Respondent Worse Off	46.9	53.1	100.0	49

$$\chi^2 = 9.56 \quad df = 1 \quad p < .01 \quad N = 91 \quad \bar{c} = .480$$

Table 5.10 confirms the hypothesis that satisfaction with the industrial sector is related to the perceived comparison with reference group members in the agricultural sector.

Two further questions were asked to tap the relationship between industrial sector satisfaction and perceived comparison with reference group members in the service sector.

"When you compare yourself with your mates who are traders, or in such related areas, do you think that on the whole you are:

- a. Better off than all of them?
- b. Better off than most of them?
- c. Doing as well as they are?
- d. Most of them are better off than you are?
- e. All of them are better off than you are?" (Question 40)¹

"When you compare yourself today as an industrial worker, do you feel:

- a. More satisfied working in industries than your mates who are in trading or related fields?

¹These were further collapsed into two categories: Respondent Better Off or Worse Off.

- b. Less satisfied working in industries than members of your reference group who are in trading or related fields?" (Question 44)

Table 5.11. Industrial Sector Satisfaction and Perceived Comparison with Reference Group Members in Trading or Related Sector

Comparison with Reference Group	<u>Industrial Sector Satisfaction</u>			(N)
	Satisfied	Dissatisfied	Total	
Respondent Better Off	67.9	32.1	100.0	(28)
Respondent Worse Off	24.1	75.9	100.0	(83)

$$\chi^2 = 17.6 \quad df = 1 \quad p < .001 \quad \bar{c} = .581 \quad N = 111$$

Table 5.11 above also confirms the hypothesis about the relationship of reference group comparison and sector satisfaction.

Relationship of Other Variables to Sector Satisfaction

In addition to utilizing reference group as a viable independent variable for predicting sector satisfaction, this study also used other independent variables to test their association with sector satisfaction. Such variables include skill level, job control and amount of help given to extended kin members.

When industrial sector satisfaction in relation to reference group is related to skill level, these are found to be significant at the .001 for both agriculture and service. As indicated earlier, skill is a scarce commodity in Nigeria and in most developing countries, and is therefore both highly evaluated and gives greater

prospects for mobility. It is assumed therefore that such skilled workers will feel more satisfied with the industrial sector than semi-skilled or unskilled workers. The distribution we obtained is as follows:

Table 5.12. Industrial Satisfaction in Relation to Reference Group Members in the Agricultural Sector Compared by Skill Level

Industrial Satisfaction in Relation to Reference Group in Agriculture	<u>Skill Level</u>		
	Skilled	Semi-skilled	Unskilled
More Satisfied	88.5	81.2	51.8
More Dissatisfied	<u>11.5</u>	<u>18.8</u>	<u>48.2</u>
Total (N) 129	100.0 (61)	100.0 (16)	100.0 (52)

$$\chi^2 = 19.7 \quad df = 2 \quad p < .001 \quad \bar{c} = .571 \quad N = 129$$

Data in Table 5.12 clearly reveal that skill level is significantly related to the industrial worker's satisfaction or dissatisfaction when compared to members of his reference group in the agricultural sector.¹

The distribution of industrial satisfaction in relation to reference group members in the service sector by skill level is shown in Table 5.13.

Table 5.13 further confirms the relationship between

¹In all these analyses, no causal connections are posited not only because the data are not amenable to such analysis, but more importantly because of the logical difficulties of positing causal connections. All the data say is that there is a relationship or an association between two variables.

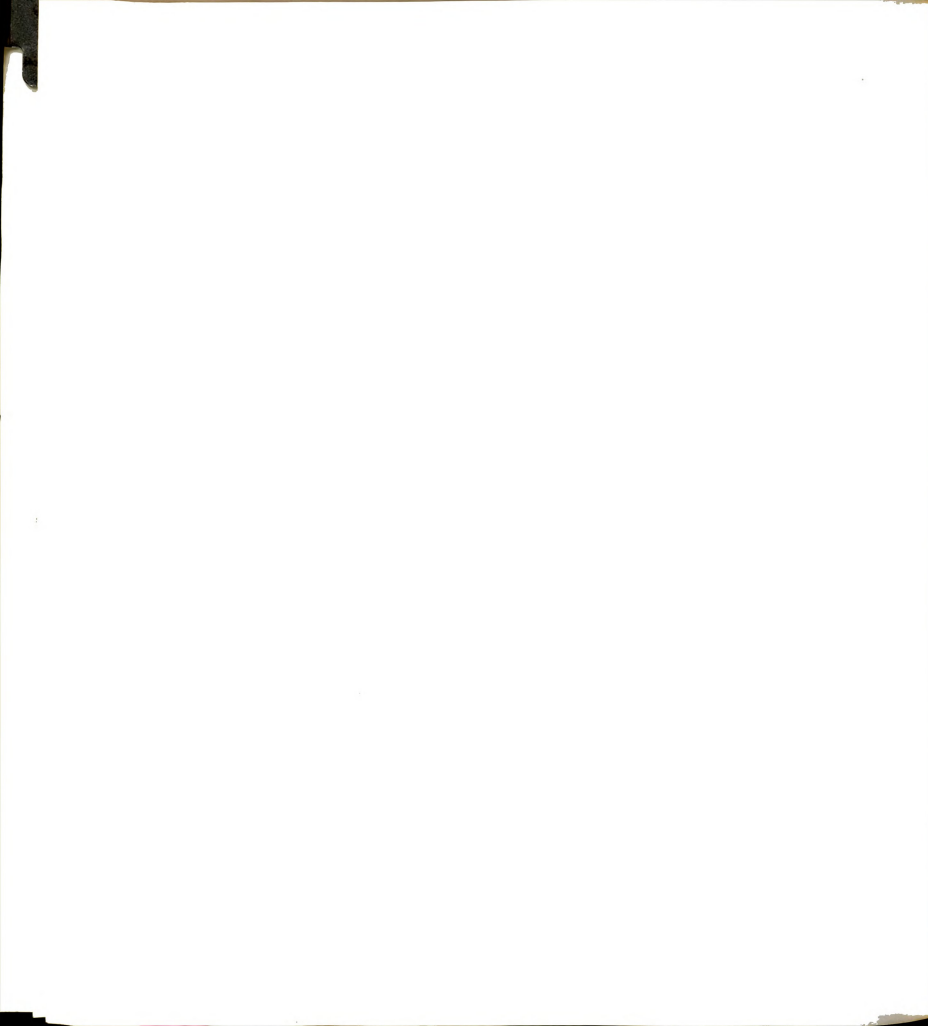
skill level and sector satisfaction. However, it will be noticed that the degree of satisfaction decreases from the agricultural to the service sector. This pattern can be accounted for by the differential attitudes toward the agricultural and service sectors. This is so because of the relatively greater distaste industrial workers have for the agricultural sector.

Table 5.13. Industrial Satisfaction in Relation to Reference Group Members in the Service Sector Compared by Skill Level

Industrial Satisfaction in Relation to Reference Group in Service	<u>Skill Level</u>		
	Skilled	Semi-skilled	Unskilled
Satisfied	65.6	62.5	21.2
Dissatisfied	<u>34.4</u>	<u>37.5</u>	<u>78.8</u>
Total (N) 129	100.0 (61)	100.0 (16)	100.0 (52)

$$\chi^2 = 24.0 \quad df = 2 \quad p < .001 \quad \bar{c} = .578 \quad N = 129$$

Finally, this study also tested the relationship between the amount of help the industrial worker gives to his kinship group and his satisfaction with the industrial sector. The specific hypothesis was that industrial satisfaction will be positively related to the amount of help the industrial worker gives to his kinship group. The reasoning here is that the performance of traditional duties will give the industrial worker a sense of satisfaction since Nigerian society is still tradition-oriented.



This hypothesis was, however, not confirmed.¹ The only explanation that may be offered here is that the discharge of kinship obligations is such a basic aspect of social living that it is not regarded in relation to satisfaction.

Conclusion

From the foregoing, it can be concluded that there are certain social factors operating in the selection or preference for a particular sector and that such preferences do not occur randomly. Among variables that account for sector preference are rural-urban background with those of rural background preferring the industrial sector more than those of urban background (67% and 37%), while those of urban background preferred the service sector more than those of rural background (55% and 28%). With regard to the reasons for such sector preferences, those of urban background preferred their sector of choice primarily for financial gains, while those of rural background gave prestige as the major reason for the choice of their sector. Since preference for a particular sector is not necessarily indicative of satisfaction with the sector, different measures were utilized to tap sector satisfaction. Satisfaction with the industrial sector was found to be

¹For sector satisfaction, $\chi^2 = 1.20$ df = 3
 $p < .75$ $\bar{c} = .142$. For occupational satisfaction, $\chi^2 = 2.40$
 df = 2 $p < .30$ $\bar{c} = .209$. For work satisfaction, $\chi^2 = .330$
 df = 2 $p < .95$ $\bar{c} = .080$.

significantly related to reference group behavior, i.e., in relation to the relative positions of reference group members. Sector satisfaction was also found to be significantly related to skill level with skilled workers preferring the industrial sector more so than semi-skilled or unskilled workers. Age, amount of help, education, marital status were all found not to be related to sector satisfaction.

In general, Nigerian factory workers in our sample appear to be relatively satisfied with working in the industrial sector and are willing to engage in such work. This tends to confirm the contention of W. M. L. Bispham that "there is now a ready-made labour force fully willing to work in industrial conditions. . . ." ¹ From all indications, this tendency will continue and possibly increase, barring a cataclysmic disruption of the economy.

2. The Industrial Worker and Occupational/Job Satisfaction

The industrial sector does not represent a homogeneous entity, for with economic and technological developments, changes in the meaning of occupational categories occur. Furthermore, endless redefinitions and industrial classifications and reclassifications emerge. ² The social

¹Bispham, op. cit., p. 55.

²Miller and Form, op. cit., pp. 60 ff.

and technical division of labor produces these changes. As a society begins to develop technologically, this will be accompanied by an increased need for skills to operate and supervise technical equipment. There will thus be a relative increase in skill level to sustain the technological development. However, as functions become more subdivided with a resulting accentuated division of labor and specialization of functions, a process of the decomposition of skills will follow, resulting in more semi-skilled workers whose primary concern will be with machine-tending operations. Most of these skills will be tied to particular industries or plants resulting in difficulties in interchangeability. Thus, the embossing operator in Metal Containers, for example, can hardly move horizontally to another industry to do the same kind of work since his job is a specialized one produced by the functional division of the production process in the factory. Thus, these jobs or occupations tend to cluster around specific types of industries. There are, however, a few such as fitters, welders, which are interchangeable to a large extent. Since in the Nigerian situation, fitters are differentially defined in different industries, most of them tend to become job-type rather than trade-type occupations. Even though Everett Hughes had advocated such a distinction, such a distinction does not seem to be meaningful in the

Nigerian situation.¹

The general hypothesis used here to test occupational satisfaction is that: occupational satisfaction is related to reference group behavior. The specific hypothesis that derives from the general hypothesis is that: occupational satisfaction is related to the perception of the industrial worker of the relative occupational position of his reference group members.

Hypothesis: The more the industrial worker perceives members of his reference group to be in higher occupations or jobs than he is, the more he will be dissatisfied with his occupational position.

and

The more the industrial worker perceives members of his reference group members to be in lower occupational positions than he is, the more he will be satisfied with his occupational position.

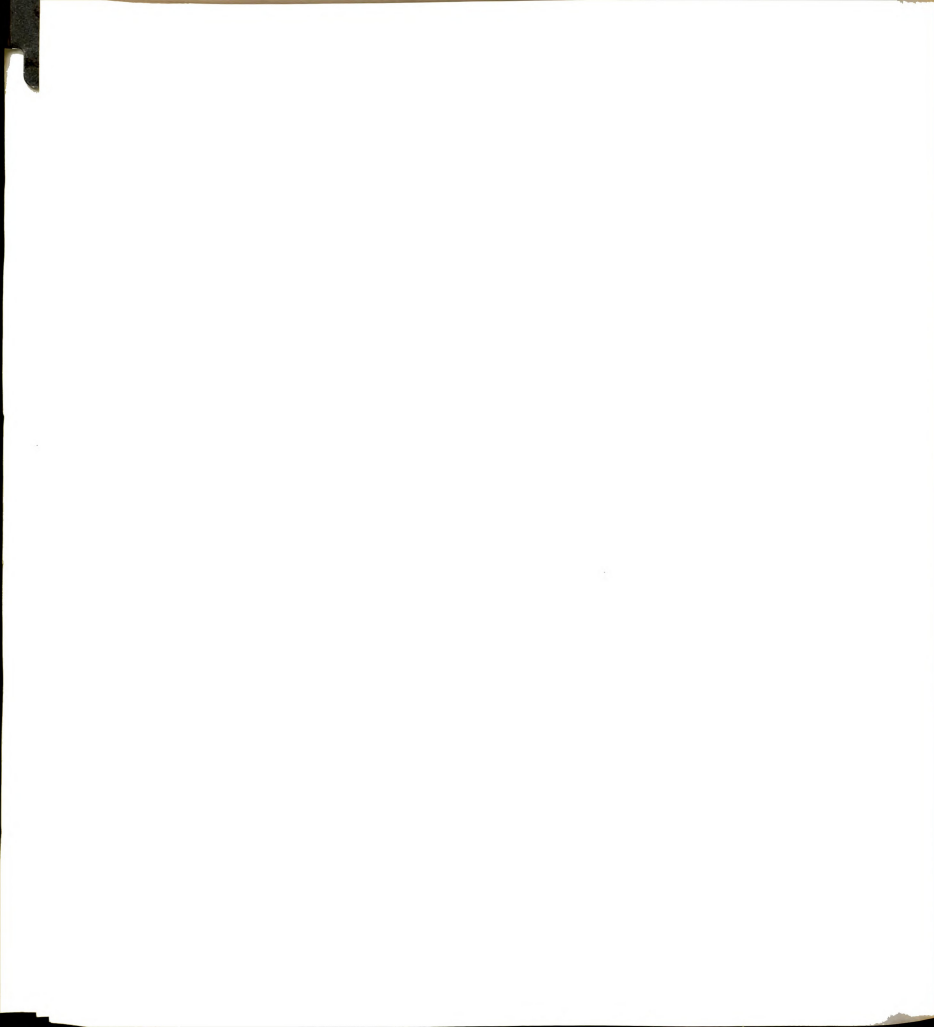
In order to ascertain the comparison with reference group members, the following question was asked:

"Do you think that your present job is:

- a. Higher than the job of all of your mates?
- b. Higher than the job of most of your mates?
- c. Equal to the job of your mates?
- d. Lower than the job of most of your mates?
- e. Lower than the job of all of your mates?"²

¹Hughes, op. cit., pp. 754-68.

²These were then collapsed into three categories with (a) and (b) forming one category, (c) a category, and (d) and (e) a third category.



To tap satisfaction with the job or the occupation a different type of question was asked. Workers were not asked directly whether they were satisfied or not with their present job or occupation. A more meaningful approach was to tap their attachment and commitment to their jobs with the implication that those who are committed and attached to a particular job or occupation are also satisfied with it. The question was phrased in such a way as to give them a choice and thereby minimize the possibility of their feeling attached mainly because of inertia or lack of alternative opportunities. There was also a built-in control for pecuniary rewards as well as promotion opportunities. Thus the question focussed on basic satisfaction with the job or the occupation.

"Suppose you quit your job today, what job would you like to have, assuming that you will get the same pay and promotion chances as you have now:

- a. Same job/occupation as you have now?
- b. A different job/occupation?"

Table 5.14. Reference Group Comparison and Job or Occupational Satisfaction

Comparison with Reference Group	Job/Occupational Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Job higher than reference group	83.3	16.7	100.0	(60)
Job equal to reference group	50.0	50.0	100.0	(4)
Job lower than reference group	54.6	45.4	100.0	(77)

$$\chi^2 = 13.10 \quad df = 2 \quad p < .002 \quad \bar{c} = .429 \quad N = 141$$

Table 5.14 indicates that there is a significant relationship between comparison with members of reference group and satisfaction with the job or occupation. It should be pointed out that here satisfaction or dissatisfaction refers primarily to the preference for the job or occupation over and above other jobs and occupations. This preference indicates a commitment to the job or occupation. It is significant though that of those who felt that their jobs or occupations were lower than those of members of their reference group, 55% were satisfied, as opposed to 45% who felt dissatisfied. This further indicates the strong commitment to the occupation with two-thirds being satisfied with their occupation as opposed to one-third who were dissatisfied.

Attitudes toward one's occupation, in addition to being conditioned by reference group comparison, may also be a matter of personal adjustment to the occupational subculture. This implies the influence of occupational socialization in determining levels of satisfaction. To the extent that within a given occupational or job category workers may differ in their levels of satisfaction, it will also be useful to look at occupational conditions which might have an influence on satisfaction. Thus, it will be meaningful to compare occupational satisfaction in terms of skill levels. Table 5.15 shows this comparison.

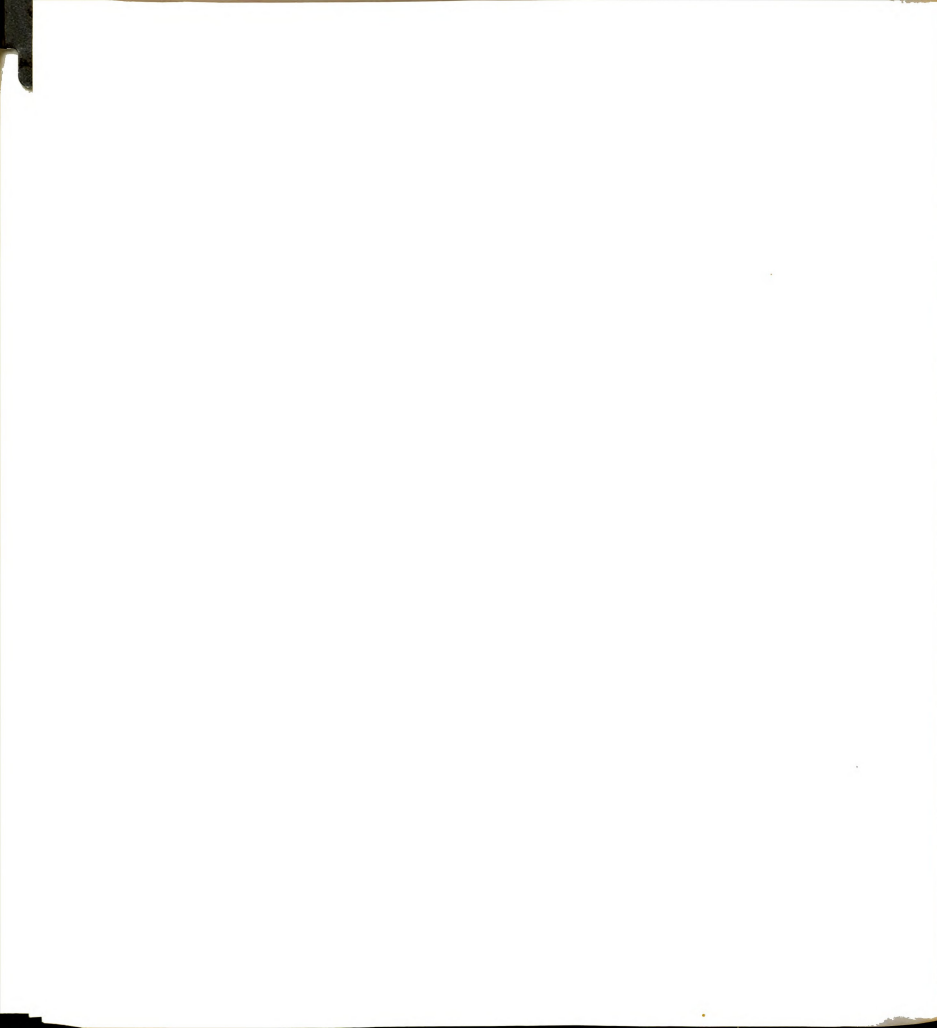


Table 5.15. Level of Occupational Satisfaction by Skill Level

Skill Level	Occupational Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Skilled	79.6 (39)	20.4 (10)	100.0	(49)
Semi-skilled	70.0 (7)	30.0 (3)	100.0	(10)
Unskilled	31.6 (12)	68.4 (26)	100.0	(38)

$$\chi^2 = 21.0 \quad df = 2 \quad p < .001 \quad N = 97 \quad \bar{c} = .616$$

Recognizing the significance of skill in developing economies, one could understand that satisfaction with occupation increases as one moves from unskilled to skilled work. If we collapse the skilled and semi-skilled categories, we obtain this distribution as shown in Table 5.16.

Table 5.16. Level of Occupational Satisfaction and Skill Level

Skill Level	Occupational Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Skilled/ Semi-skilled	77.97	22.03	100.0	(59)
Unskilled	31.58	68.42	100.0	(38)

$$\chi^2 = 31.58 \quad df = 1 \quad p < .001 \quad c = .780 \quad N = 97$$

Age, educational level, marital status were not found to be related to occupational satisfaction. The main reason why education is not predictive is that most of the workers are on the same or about the same educational level which is the sixth grade. Age, however, presents an



interesting pattern when compared to skill level.

Table 5.17. Skill Level and Age

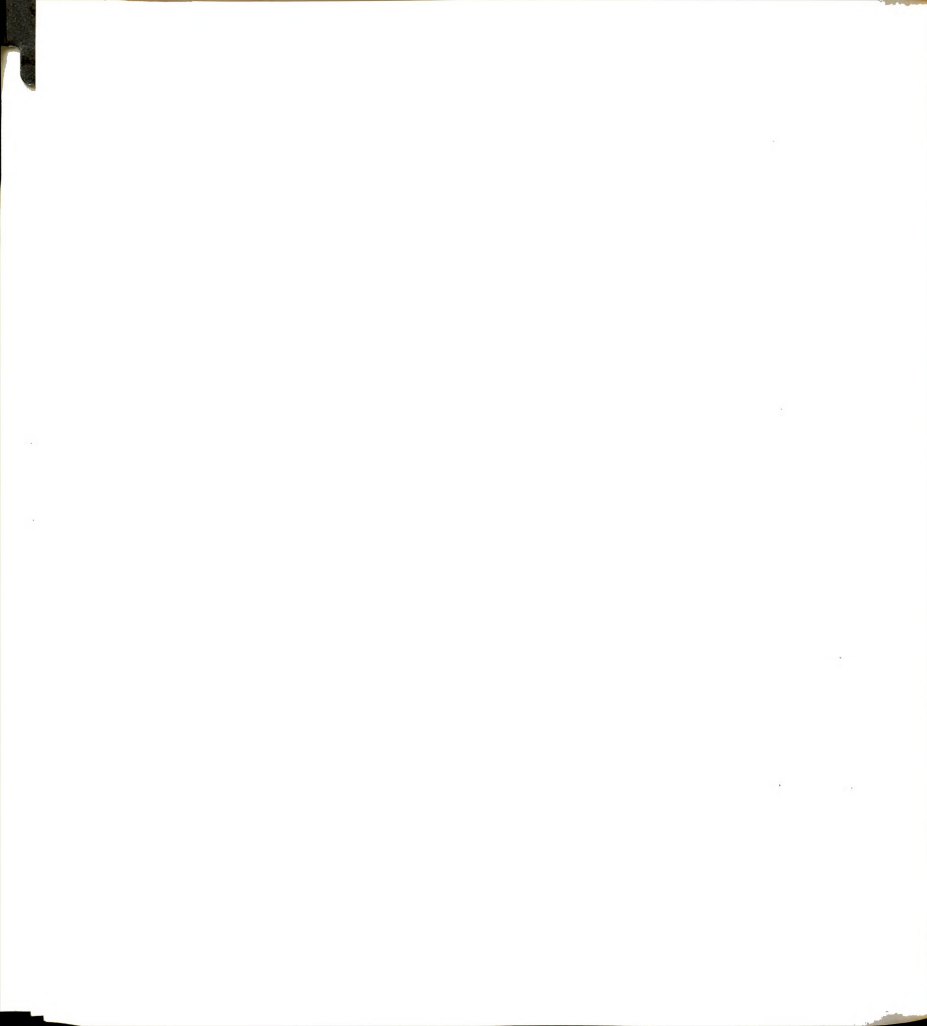
Age	Skill Level			Total	(N)
	Unskilled	Semi-skilled	Skilled		
16-25	45.8	8.4	45.8	100.0	(24)
26-35	33.8	14.1	52.1	100.0	(71)
36-45	48.0	12.0	40.0	100.0	(25)
46 and above	55.6	11.1	33.3	100.0	(9)

$$\chi^2 = 4.1 \quad df = 6 \quad p < .40 \quad c = .223 \quad N = 129$$

From this table we can observe that as age increases skill level also increases until the age of 35 and then gradually declines. This represents a trend even though not quite discernible now. However, with the new government programs of an emphasis on technical education, the expectation is that in about five to ten years, age will become significantly related to skill level with the younger workers being more skilled. This means that there will emerge a negative relationship between age and skill level.

Desire to Change Occupation

A different question dealing with occupational satisfaction was also asked without any controls. This was done to probe the intensity of their feelings. The question is: "Have you ever thought of changing your job or occupation?" Responses to this question distributed as follows:



<u>Never</u> think of changing	21.3%	(30)
<u>Sometimes</u> think of changing	39.7	(56)
<u>Always</u> think of changing	<u>39.0</u>	<u>(55)</u>
Total	100.0	(141)

A little over one-fifth of the workers never think of changing their job or occupation, and about two-fifths each always or sometimes think of changing. This indicates a degree of occupational adjustment among the workers, when we realize that pecuniary gains and freedom from routinized jobs are not controlled for.

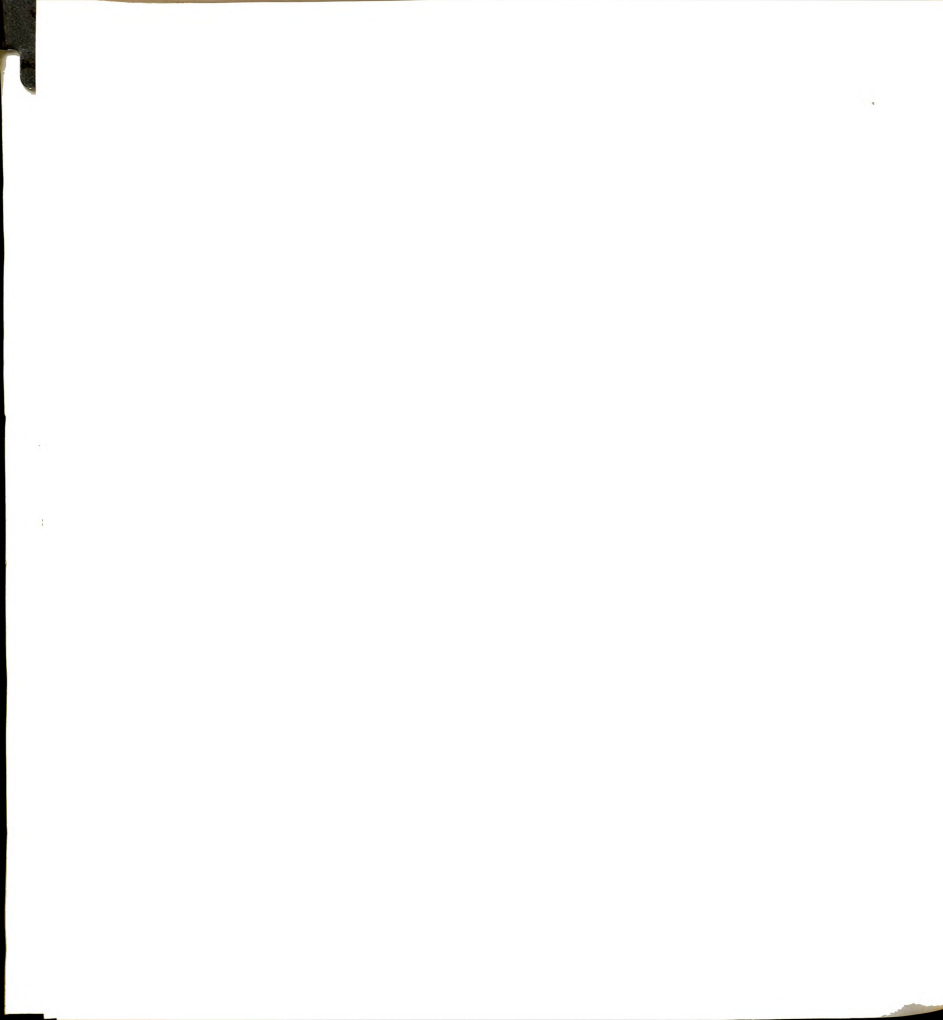
What social factors account for these different levels of adjustment? Quite significantly, it was found that desire to change jobs or occupations is not related to skill level, and that skilled workers are as likely to desire to change as unskilled or semi-skilled workers.

Table 5.18. Association of Skill Level and Desire to Change Occupation

Skill Level	<u>Desire to Change</u>			Total	(N)
	Never	Sometimes	Always		
Skilled	16.4	52.5	31.1	100.0	(61)
Semi-skilled	37.6	31.2	31.2	100.0	(16)
Unskilled	23.1	30.8	46.2	100.0	(52)

$$x^2 = 8.0 \quad df = 4 \quad p < .07 \quad \bar{c} = .327 \quad N = 129$$

Only two variables were found to be related to the desire to change. These are comparison with reference group and liking for the present job. Workers were asked to compare their present job with other jobs that they have held



and to indicate whether they liked the present or a previous job better. Those who liked their present job better were less willing to change than those who liked their previous jobs better.

Table 5.19. Association of Job Evaluation with Desire to Change

Job Liking	Desire to Change Job			Total	(N)
	Never	Sometimes	Always		
Like Present Job	29.4	38.2	32.4	100.0	(68)
Like Previous Job	9.8	29.2	61.0	100.0	(41)

$$\chi^2 = 9.9 \quad df = 2 \quad p < .005 \quad \bar{c} = .420 \quad N = 109$$

Table 5.20. Association of Occupational Comparison with Reference Group Members with Desire to Change

Desire to Change	Reference Group Comparison		
	Worker Better	Off Worker	Worse Off
Never	31.8		15.6
Sometimes or Always	<u>68.2</u>		<u>84.4</u>
Total (N)	100.0 (44)		100.0 (96)

$$\chi^2 = 4.82 \quad df = 1 \quad p < .04 \quad \bar{c} = .286 \quad N = 140$$

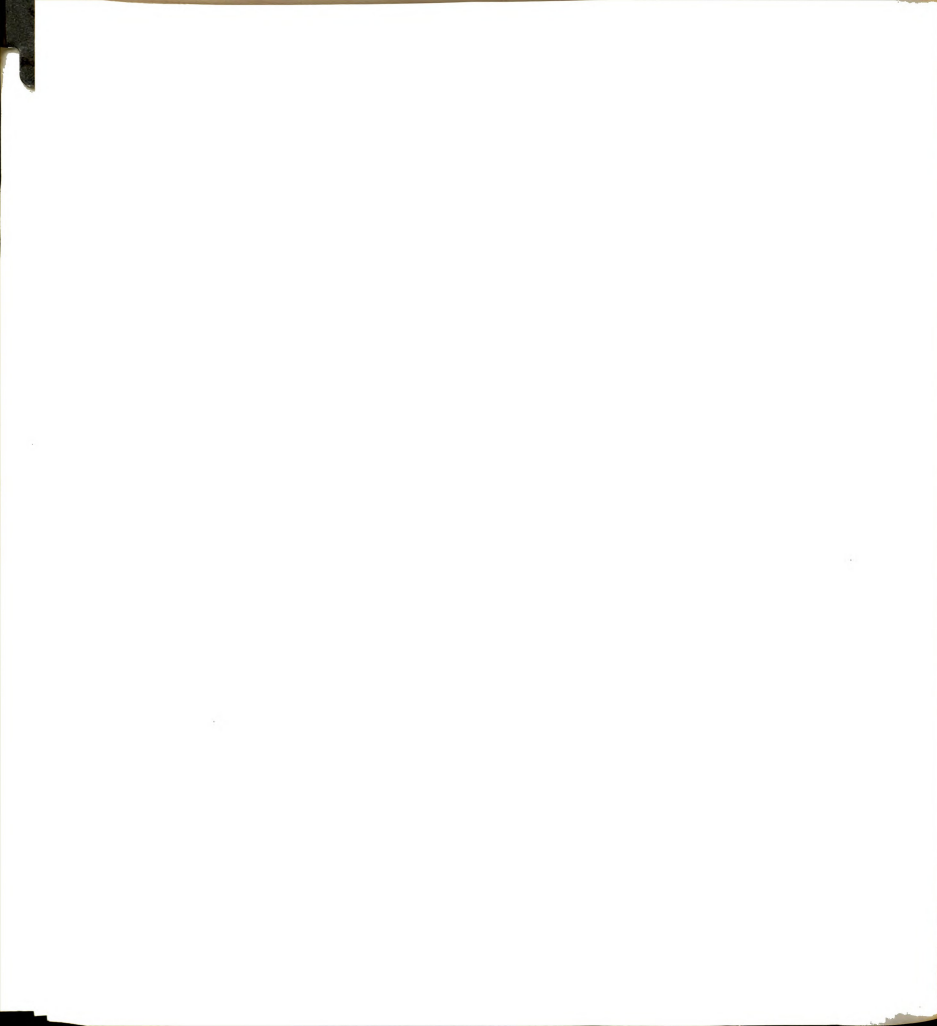
When desire to change is computed with the job the respondent liked best (present or previous job), 83% of those who have never thought of changing liked their present job. Of those who have thought of changing sometimes, 68% liked the present job, while only 47% of those who have always thought of changing liked their present job best.

Furthermore, among those who would never change, about half feel they are better off than their mates while only about one-quarter who have sometimes or always thought of changing felt they were better off. Furthermore, the desire to change is associated with comparisons with reference group members.¹

Conclusion

On the whole, there seems to be a considerable degree of occupational or job satisfaction, as indicated by the industrial workers in the four plants studied. This would appear to be a general trend among Nigerian factory workers, as indicated by Bispham. The best predictors of occupational satisfaction seem to be comparison with members of reference group, preference for present or previous job, and skill level. No other variables were significantly related to this. To the extent that skill level represents a degree of socialization into occupational patterns, this relationship is expected. Furthermore, in consonance with our hypothesis, those perceiving the members of their reference group to be on the whole higher than they are in terms of occupational comparison felt more dissatisfied

¹The absence of significant association between desire to change and skill level, but the significant relationship of desire to change and reference group comparison, underscores our contention that in a causal sequence, it is more meaningful as far as our data go to use reference group comparison instead of job satisfaction as the independent variable.



with their occupations than those who feel that on the whole their occupations are higher than those of their reference group. This tends to confirm our hypothesis about the relationship of occupational satisfaction and comparison with reference group members.

3. Industrial Worker and Work Satisfaction

In the two preceding sections, the main concern has been with sector and occupational satisfaction, thus focussing on what the worker is. The present section will deal with the specific performance of work routines and, in this sense, it will be concerned with what the worker does as opposed to what he is.

In any given factory, the worker may be called upon to perform only some of the operations within a wider range of operations pertinent to his job or occupation. Thus, he may be an embosser, but his job may require only a few of the many operations he is capable of performing on the embossing machine. The concern here is not with his satisfaction with performing only this aspect of his total repertoire of skills, but rather with the degree to which he is able to control these few operations that he is called upon to perform. This is the crucial alienation factor that Karl Marx pointed out.

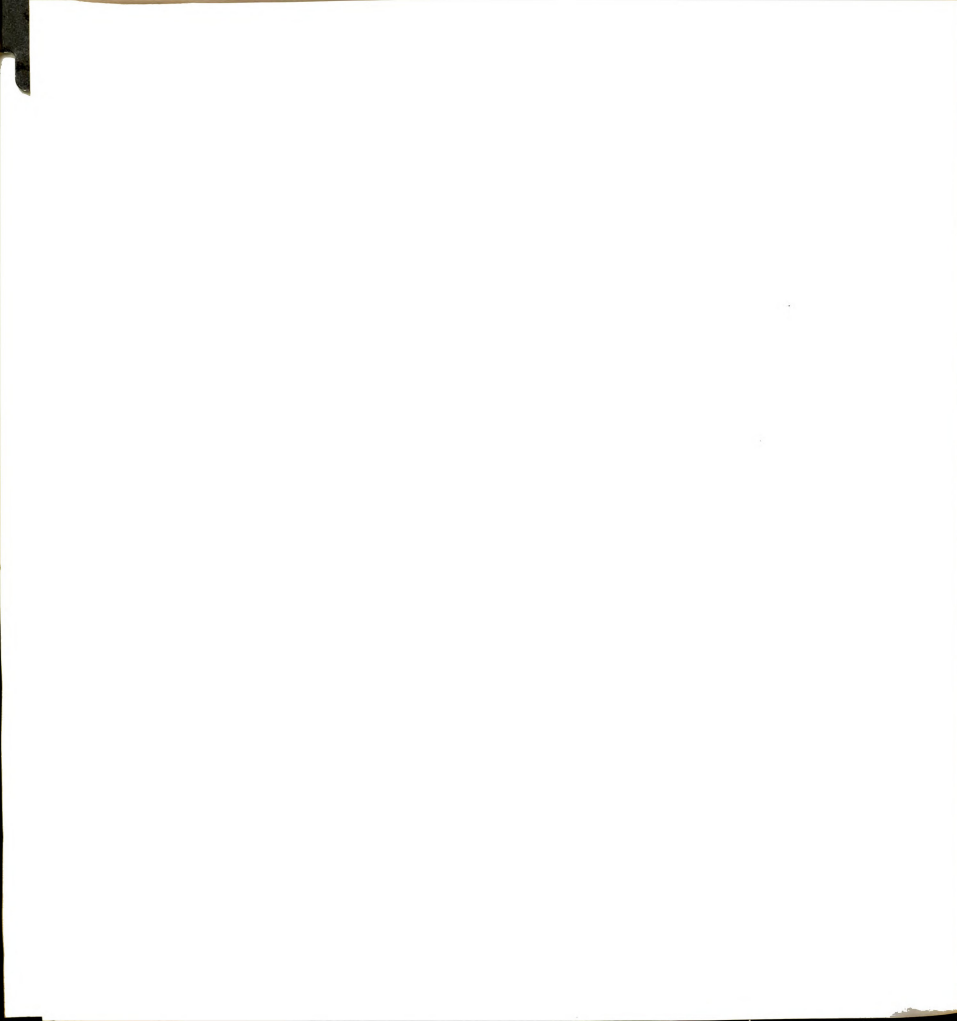
The actual content of the work and how the worker does it are determined to large measure by the necessities of the production process and the general organizational

work flow. Ultimately, job design and job description are decided by the requirements of the technological equipment and the organizational structure of work activity. In this sense, the particular work-task ties the individual to the technological environment, and thus constitutes a link between the technical division of labor and the social division of work. More sociologically, however, the technical job description defines only a part of the worker's behavior.¹ Beyond the specific tasks he must perform in order to do his work, there are also patterns of social relations which link him to the organizational structure, the members of his informal group, and the cluster of technical relationships he must maintain in order to perform his work tasks. His satisfaction with the technical division of work is predicated on the degree of his control of the work. This is so because the lack of control over one's pace of work and the lack of autonomy in the use of work tools results in a general low level of satisfaction.² This derives from the general Marxian position on alienation and the worker.

At this level, however, comparisons with reference group outside the factory will not seem to be meaningful

¹Miller and Form, op. cit., p. 169.

²Robert Blauner, op. cit., p. 16 ff. Also see Ely Chinoy, Automobile Worker and the American Dream (New York: Doubleday and Co., 1955), pp. xvi-xvii.



to the extent that this level defines not so much what members of the reference group are, but what they do, and this is more difficult to evaluate. Thus, the evaluation will shift to co-workers whose specific job operations can more readily be evaluated. The organizing hypothesis at this level therefore is that: Work satisfaction will be positively related to the worker's ability to control his work relative to his reference group in the same factory or plant. Accordingly, two questions were asked, one to ascertain level of job control and the other to ascertain satisfaction with the work. It is important to point out here that most of the workers seem to be dissatisfied with their specific job tasks.

		<u>N</u>
Satisfied	15.6%	(22)
Not satisfied/not dissatisfied	15.6%	(22)
Dissatisfied	<u>68.8%</u>	<u>(97)</u>
Total (N)	100.0	(141)

However, about one-seventh indicated satisfaction with their job tasks. This was then correlated with job or work control. This distribution is as follows:

Table 5.21. Work Satisfaction and Work Control

Work Control within Plant	<u>Work Satisfaction</u>			Total	(N)
	Satisfied	Medium	Dissatisfied		
Control	20.3	21.2	56.5	100.0	(69)
No Control	11.1	8.3	80.6	100.0	(72)

$$\chi^2 = 9.70 \quad df = 2 \quad p < .01 \quad N = 141 \quad \bar{c} = .371$$

Among those who are satisfied, about two-thirds control their work pace, while among those dissatisfied, only about two-fifths control their pace of work. Among those with middle satisfaction, 73% control their work pace. The percentage of dissatisfaction (about 69%) may appear to be relatively high on face value, but when the relative newness of the factory system and the attendant problems of adjustment to it are taken into account, the figure represents a hopeful sign for the future adjustment of industrial workers in Nigeria to the technological requirements of the work. This is particularly impressive when one has taken into account certain verbal dissatisfaction with the general conditions of work, such as pay, lack of medical facilities and other factors.

Satisfaction with the technical conditions of work does not appear to be related to any other thing except the worker's perception of how his boss views his work. This question was asked to elicit the attitude of the worker to the appraisal by significant others of his work: "Does your immediate boss know that your work is important or unimportant?" The rationale for this question is that ~~if~~ a worker thinks that his boss knows how important or ~~un~~important his work is, it will provide him with an evaluation of his work and thus enable him to relate not only to his work but to other significant others in the work process.

Table 5.22. Work Satisfaction and How Boss Views the Importance of the Respondent's Work

Work Satisfaction	Boss's View of Worker's Work	
	Important	Unimportant
Satisfied	34.4	6.7
Dissatisfied	<u>65.6</u>	<u>93.3</u>
Total (N)	100.0 (125)	100.0 (15)

$$\chi^2 = 4.8 \quad df = 1 \quad p < .03 \quad N = 140 \quad \bar{c} = .247$$

Even though the percent of those satisfied is still relatively low, there is a significant relationship between satisfaction with the work and whether or not the boss recognizes the importance of the work of the industrial worker. Thus, an appreciation of work by bosses appears to be significantly related to the industrial worker's satisfaction with his work. This is significant in industrial management to the extent that it makes it possible for the worker to relate meaningfully to an impersonal system and thus tends to take the raw edge of impersonality out of the system as the industrial worker relates to the work environment.

Work satisfaction does not appear to be significantly related to skill level. Only three-tenths of skilled workers are satisfied with their work as compared to seven-tenths dissatisfied. Table 5.23 indicates the pattern of relationship.

Table 5.23. Association of Work Satisfaction and Skill Level

Skill Level	Satisfied	Work Satisfaction		(N)
		Dissatisfied	Total	
Skilled	29.9	70.1	100	(77)
Unskilled	28.8	71.2	100	(52)

$$\chi^2 = 0.13 \quad df = 1 \quad p < .99 \quad N = 129$$

The main explanation for the distribution in Table 5.23 is because of the peculiarity of the Metal Construction sample which contains a disproportionately large percentage of skilled workers who were working under very bad working conditions. This was expressed by most of the workers there. To see what is actually happening to the sample, it will be necessary to inspect the distribution in the factories.

Table 5.24 gives the relationship between skill level and work satisfaction in Metal Containers and Bottling, and Metal Construction.

Table 5.24. Relationship of Work Satisfaction and Skill Level in the Three Factories

Skill Level	Work Satisfaction					
	MCF*/Bottling			Metal Construction		
	Sat.	Diss.	Total	Sat.	Diss.	Total
Skilled	57.9	42.1	100 (38)	15.0	85.0	100 (40)
Unskilled	25.6	74.4	100 (43)	20.0	80.0	100 (5)

$$\chi^2 = 8.7 \quad df = 1 \quad p < .008 \quad N = 81 \quad \chi^2 = .05 \quad df = 1 \quad p < .97$$

N = 45

*MCF means Metal Containers Factory.

Thus Table 5.24 shows that skill level is related to work satisfaction in Metal Containers and Bottling, but that these two variables are unrelated in Metal Construction. Indeed the lack of relationship between these two variables reported in Table 5.23 can be accounted for by the unique sample represented by Metal Construction in which skilled workers are subjected to harsh conditions of work coupled with ineffective human relations.

General Conditions of Work

When questions were asked as to what general conditions of work would induce workers to quit or change their jobs, the most important reason was "the pay is too small." This distribution is as follows:

1. Pay too small	28.1%
2. My peer group members earn better	17.0
3. I want to learn more things	12.3
4. I don't feel secure in my job	9.5
5. I want to serve my country better	8.6
6. Leave allowance and leave conditions	8.0
7. The job is too hard	7.7
8. Lack of medical facilities	5.2
9. They shout at me too much	2.1
10. Lack of housing facilities	.9
11. I don't like my co-workers	.3
12. Too much supervision	<u>.3</u>
Total	100.0

From this tabulation it can be seen that pay, comparison with reference group and desire to learn more account for more than 50% of the concern of the workers.

This same question was asked again in a different form toward the end of the interview. It was asked as an

open-ended question and the responses were coded. The question was: If you had power to change things around, what would you do to make factory workers more satisfied and happier? The responses followed this pattern:

Give them more pay	66.0%
Improve physical working conditions	18.4
Staff them or promote them	5.0
Will not bully them	2.1
Will not sack them arbitrarily	1.4
Give them better training for their jobs	1.4
Give them fair pay for fair job	1.4
Others	<u>4.3</u>
Total	100.0

From this tabulation one can conclude that the primary concern is with pay and, secondarily, with improving the general working conditions. However, since skill level is assumed to represent a degree of socialization into industrial life, these categories were further collapsed into three: pay, physical work conditions, and general work relations, and then compared with skill level to see if any pattern would emerge. There appears to be some correlation with skill level, with semi-skilled workers again forming a kind of erratic pattern.

This correlation is not significant at the .05 level, but yet we can see a pattern emerging with unskilled workers preferring pay more than skilled and semi-skilled workers, while skilled and semi-skilled workers appear to be more concerned with physical and work relations. However, most of the workers appear to prefer pay by a fairly large margin.

Table 5.25. Skill Level and What Will Make Workers More Satisfied and Happier

What to do for Workers	<u>Skill Level</u>		
	Skilled	Semi-skilled	Unskilled
Increase pay	62.7	53.3	83.7
Improve physical work conditions	23.7	26.7	10.2
Improve work relations and conditions	<u>13.6</u>	<u>20.0</u>	<u>6.1</u>
Total (N)	100.0 (49)	100.0 (15)	100.0 (59)

$$\chi^2 = 7.80 \quad df = 4 \quad p < .09 \quad N = 123 \quad \bar{c} = .332$$

Conclusion

Work satisfaction was found to be related to job control and also with relations with the boss in terms of whether or not he views the worker's work as important. This indicates a significant pattern of work relations. Work satisfaction does not appear to be related to any other variables. In terms of what will make workers more satisfied with their work, most of them indicated pay, physical work conditions and work relations, and comparison with members of their reference group.

4. Factories and Sector Satisfaction

Since our general hypothesis about reference group comparisons and sector satisfaction was confirmed at the .01 level for the whole sample, we would also expect that this relationship will hold true in inter-factory comparison. Since the hypothesis is assumed to hold true



irrespective of the internal structures of factories since it deals with self conception to which the factory structure is irrelevant, we will hypothesize that the same relationship will hold true when factories are compared. Here it must be pointed out once again that the central focus is with sector satisfaction, that is, the satisfaction the industrial worker feels that he gets from the industrial sector vis-a-vis the agricultural and the service or commercial sectors. We would expect that if there are any differences in comparisons with reference groups in these three factories, there will also be corresponding differences in the level of satisfaction with the industrial sector.

Table 5.26. Agricultural Reference Group Comparison and Industrial Sector Satisfaction for Three Factories

Factories	A. Ref. Comparison			(N)	B. Sector Satisfaction			Total (N)
	Better Off	Worse Off	Total		Satisfied	Dissatisfied	Total	
Containers	68.3	31.7	100.0	(38)	61.9	38.1	100.0	(63)
Construction	88.9	11.1	100.0	(32)	82.2	17.8	100.0	(45)
Bottling	46.4	53.6	100.0	(17)	57.1	42.9	100.0	(28)

$$A. \chi^2 = 15.2 \quad df = 2 \quad p < .001 \quad N = 87 \quad \bar{c} = .592$$

$$B. \chi^2 = 6.6 \quad df = 2 \quad p < .04 \quad N = 136 \quad \bar{c} = .314$$

Table 5.27. Service Reference Group Comparison and Industrial Sector Satisfaction for Three Factories

Factories	A. Ref. Comparison			B. Sector Satisfaction		
	Better Off	Worse Off	Total (N)	Satisfied	Dissatisfied	Total (N)
Containers	39.7	60.3	100.0 (53)	38.1	61.9	100.0 (63)
Construction	73.3	26.7	100.0 (33)	64.4	35.6	100.0 (45)
Bottling	7.1	92.9	100.0 (20)	7.1	92.9	100.0 (28)
A. $\chi^2 = 31.5$ $df = 2$ $p < .001$ $N = 106$ $\bar{c} = .699$						
B. $\chi^2 = 23.9$ $df = 2$ $p < .001$ $N = 136$ $\bar{c} = .565$						

What the two tables (5.26 and 5.27) indicate is that there are significant differences among the three factories in terms of how they compare themselves with members of their reference groups and these differences are reflected in differences in how they are satisfied with their sector of employment. Before proceeding to the rest of the relationships, it should be observed that Construction workers have the highest sector satisfaction (about 73% satisfied), followed by Containers (about 50% satisfied), and then Bottling (about 32% satisfied). On the whole, Construction workers also have the largest percentage of those who feel that they occupy better off positions than members of their reference group (about 81% feel better off), then Containers workers (about 54% feel better off), and then Bottling (about 31% feel better off).

In order to test the relationship between reference

group comparisons and sector satisfaction, however, it is necessary to investigate this relationship in each of the three factories.

Table 5.28. Distribution of Agricultural Reference Group Comparison and Industrial Sector Satisfaction in Metal Containers

Agricultural Reference Group Comparison	Industrial Sector Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Better Off	79.0	21.0	100.0	(19)
Worse Off	31.6	68.4	100.0	(19)

$$\chi^2 = 8.6 \quad df = 1 \quad p < .01 \quad \bar{c} = .675 \quad N = 38$$

Table 5.29. Distribution of Service Reference Group Comparison and Industrial Sector Satisfaction in Metal Containers

Service Reference Group Comparison	Industrial Sector Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Better Off	66.7	33.3	100.0	(12)
Worse Off	24.4	75.6	100.0	(41)

$$\chi^2 = 7.3 \quad df = 1 \quad p < .01 \quad \bar{c} = .546 \quad N = 53$$

It is evident from Tables 5.28 and 5.29 that in Metal Containers there is a statistically significant relationship between reference group comparisons and sector satisfaction.

Table 5.30. Distribution of Agricultural Reference Group Comparison and Industrial Sector Satisfaction in Metal Construction

Agricultural Reference Group Comparison	<u>Industrial Sector Satisfaction</u>			(N)
	Satisfied	Dissatisfied	Total	
Better Off	100.0	--	100.0	(16)
Worse Off	75.0	25.0	100.0	(16)

$$x^2 = 4.6 \quad df = 1 \quad p < .03 \quad \bar{c} = .556 \quad N = 32$$

Table 5.31. Distribution of Service Reference Group Comparison and Industrial Sector Satisfaction in Metal Construction

Service Reference Group Comparison	<u>Industrial Sector Satisfaction</u>			(N)
	Satisfied	Dissatisfied	Total	
Better Off	90.9	9.1	100.0	(11)
Worse Off	54.5	45.5	100.0	(22)

$$x^2 = 4.5 \quad df = 1 \quad p < .04 \quad \bar{c} = .543 \quad N = 33$$

Again, from the two tables above it can be seen that in Metal Construction Company, industrial satisfaction is significantly associated with reference group comparison.

In Bottling, the relationship also seems to obtain, and Tables 5.32 and 5.33 show this relationship.

Table 5.32. Distribution of Agricultural Reference Group Comparison and Industrial Sector Satisfaction in Bottling Company

Agricultural Reference Group Comparison	Industrial Sector Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Better Off	71.4	28.6	100.0	(7)*
Worse Off	20.0	80.0	100.0	(10)

$$\chi^2 = 4.5 \quad df = 1 \quad p < .03 \quad \bar{c} = .720 \quad N = 17$$

Table 5.33. Distribution of Service Reference Group Comparison and Industrial Sector Satisfaction in Bottling Company

Service Reference Group Comparison	Industrial Sector Satisfaction			(N)
	Satisfied	Dissatisfied	Total	
Better Off	--*	100.0	100.0	(4)
Equal	100.0	--*	100.0	(1)
Worse Off	6.7	93.3	100.0	(15)

$$\chi^2 = 9.6 \quad df = 2 \quad p < .01 \quad \bar{c} = .832 \quad N = 20$$

*Care should be taken in interpreting the χ^2 and the data because of the smallness of the frequencies in the cells. We have presented the data in this form for the sake of parsimony.

Again, from the two tables above (5.32 and 5.33) it can be shown that reference group comparison is significantly related to sector satisfaction.

On the whole, therefore, it can be safely stated that reference group comparison is significantly related to sector satisfaction. Whatever essential factors that induce industrial workers to make invidious comparisons

with members of their reference groups, once such comparisons are made, they have the influence of inducing satisfactory or dissatisfactory attitudes.

Even though Construction workers expressed the greatest satisfaction with their sector of employment and with their occupation (75% satisfied, as opposed to 64% in Containers and 65% in Bottling), they showed the greatest dissatisfaction with their specific job tasks. The distribution of work satisfaction in the three factories is shown in Table 5.34.

Table 5.34. Work Satisfaction by Inter-Factory Comparison

Work Satisfaction	<u>Factories</u>		
	Containers	Construction	Bottling
Satisfied	17.5	13.3	17.9
Medium	17.5	2.2	32.1
Dissatisfied	<u>65.0</u>	<u>84.5</u>	<u>50.0</u>
Total (N)	100.0 (63)	100.0 (45)	100.0 (28)

$$\chi^2 = 14.1 \quad df = 4 \quad p < .01 \quad N = 126 \quad \bar{c} = .416$$

The significant differences in work satisfaction in the three factories can be accounted for by the general conditions of service and of work. Construction workers complained most not only of the harshness of their work, but also of the danger involved in it. When this is coupled with lack of medical facilities and chances for promotion, it can be understood why they expressed the greatest

degree of dissatisfaction with their work tasks even though they had expressed greatest satisfaction with their sector and occupation. The problem is compounded when it is realized that a majority of them are skilled workers. The relatively high satisfaction with work tasks in Metal Containers can be accounted for by the substantially high proportion of skilled workers who not only control the pace of their work, but also have generally better conditions of service than Construction workers. Bottling workers have good conditions of service but very monotonous work. This accounts for the even split between satisfied and dissatisfied workers.

Conclusion

There appear to be statistically significant differences in the way industrial workers in the three main factories compare themselves with members of their reference groups and also in their levels of satisfaction with the industrial sector. The differences in reference group comparisons in the three factories are also reflected in the differences in satisfaction.

Finally, reference group comparison appears to be a viable concept to measure levels of satisfaction, whether at the sector, occupational, or work levels.



5. Industrialization and the Shifting Sources of Reference Group Membership

Chapter I suggested that as industrialization progresses, there will be a corresponding shift in the sources of reference group membership and also the sectors and jobs of reference group members. We also indicated the pattern of this shift.¹ There are two ways of approaching this problem. Comparative data could be used to demonstrate the various developmental levels as the society moves from non-industrialized to fully industrialized. We do not have such comparative data and we do not want to use secondary data because of the inherent difficulties involved. The second approach, for which we have data and which we intend to utilize, is to focus on skill levels and urbanization as indicators of industrialization, and then compare shifts in the sources and occupational locations of reference group members. The basic assumption in using skill level and urban residence is that these in turn represent degrees of socialization into the industrial productive process and the impersonal norms of urban dwelling and industrial bureaucratic work.

If our assumption is accepted as a premise, then we would expect unskilled workers to select kin members who are in non-industrial occupations as reference group members more so than skilled workers. Furthermore, those

¹See pp. 16-17 of Chapter I of this dissertation.

who are less urban would also tend to select kin members who are in non-industrial occupations more so than more urban people. Since Nigeria is at the very early stages of industrialization, we would expect few workers to select non-kin members who are in industrial occupations. The distribution we obtained from the sample is as follows:

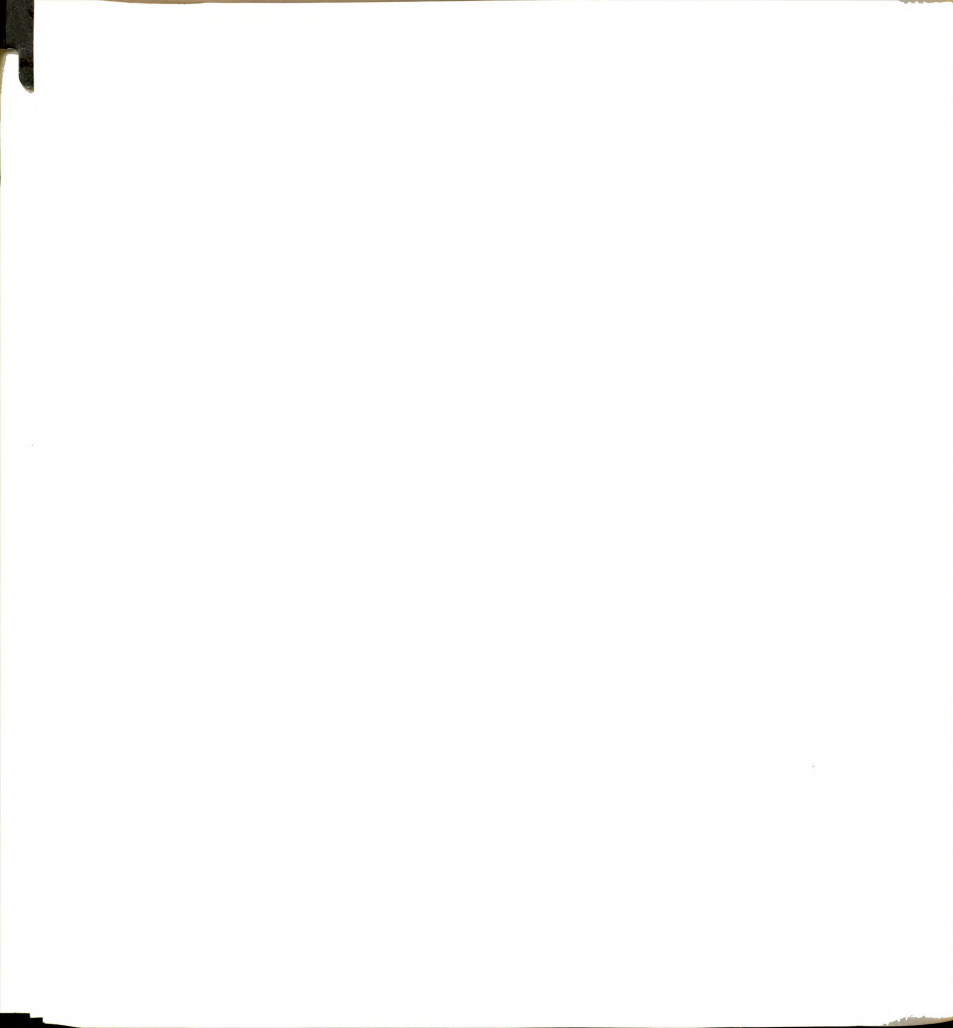
Table 5.35. Skill Level and Occupational Sector of Reference Group Members

Skill Level	Occupational Sector and Number of Reference Group Members			
	(6-3)*	(2-1)*		
	Industrial	Industrial	Non-Industrial	Total (N)
Skilled	59.0	32.8	8.2	100.0 (61)
Semi-skilled	62.4	18.8	18.8	100.0 (16)
Unskilled	27.0	36.5	36.5	100.0 (52)

$$\chi^2 = 19.2 \quad df = 4 \quad p < .001 \quad N = 129 \quad \bar{c} = .488$$

*The numbers represent the number of reference group members in the category. Respondents were asked to name a maximum of six reference group members.

Skill level is significantly related to the sector from which reference group members are selected. Significantly more skilled workers selected members of their reference group members from the industrial sector (about 92%) than semi-skilled (about 81%) and unskilled workers (about 63%). Thus, as skill level increases, there is also a correspondingly gradual shift from the selection of non-industrial to industrial reference group members. Among those who selected three to six reference group members from the



industrial sector, 60% are skilled and 23% unskilled.

The second measure used is urbanity, or the relative number of years the industrial worker has spent in an urban area. Data in Table 5.36 reveal that unlike skill level, urban residence does not appear to be related to the selection of reference group members by sector of occupation. Thus, those of rural background are as likely to select reference group members either from the industrial or non-industrial sectors, as are those of urban background.

Table 5.36. Urbanity and Occupational Sector of Reference Group Members

Urbanity	Occupational Sector and Number of Reference Group Members			
	(6-3)*	(2-1)*		
	Industrial	Industrial	Non-Industrial	Total (N)
Urban	45.1	31.4	23.5	100.0 (102)
Rural	46.2	35.9	17.9	100.0 (39)

$$\chi^2 = .6 \quad df = 2 \quad p < .25 \quad N = 141 \quad \bar{c} = .095$$

*See p. 194.

This represents a significant finding in that it tends to show that urban residence per se does not produce expected urban and industrial attitudes and behavior. Rather, it is the involvement and participation in the urban-industrial status structure, through the acquisition of industrial skills, that are significantly related to the expression of urban-industrial attitudes and behavior.

It can be deduced from the two tables above (Tables 5.35 and 5.36) that, while skill level is significantly related to the selection of reference group members in urban-industrial occupations, urban background is not so related.

To tap the kin/non-kin source of reference group members, this study sought to find how reference group members were related to the respondent. Two possible relationships were posited: traditional kinship and, as a residual category, non-traditional non-kinship. Traditional kinship relationships were tapped by two questions dealing with whether the respondent was from the same village as other reference group members and whether they were the same age.¹ As indicated earlier in this chapter, about 92% gave these two factors as conditions for the selection of the members of their reference groups. The next step is to indicate the association of these two variables with skill level and urban residence to see whether any significant patterns emerge. We would expect, ideally in a mature industrial society, that skilled and urbanized workers would select members of their reference group less by kinship ties or particularistic norms and more by universalistic

¹Age as an ascriptive status articulates role relationships in Nigerian traditional societies. Clusters of these roles produce age-grade systems which prescribe normatively oriented interaction patterns among members in each system. In a sense, they are age-cohorts. Furthermore, those who are regarded as kin as usually, in Nigeria, those who are from the same village related by affinal, consanguinal or agnatic ties. In a larger sense, these form clans. Thus kinship should be understood in Nigerian terms.



industrial norms.

There appears to be no significant relationship between urban or rural background and the selection of reference group members by the criterion of age. That is, workers of urban background are as likely to select reference group members by age as are those of rural background. However, from the table we could infer that those of rural background appear to select slightly more members of their reference group by age than those of urban background (79% as opposed to 75%). This difference, though, is not statistically significant.

Table 5.37. Urbanity and Selection of Reference Group Members of the Same Age

Urbanity	Number of Reference Group of the Same Age			
	0-2	3-6	Total	N
Urban	24.8	75.2	100.0	101
Rural	30.8	79.2	100.0	39

$$\chi^2 = .524 \quad df = 1 \quad p < .40 \quad N = 140 \quad \bar{c} = .096$$

Again we find that urban or rural background is not related to the selection of reference group members by the kinship criterion of those who are from the same village. Also, we find that those of rural background select slightly more of their reference group members from those who are from the same village than those of urban background (80% to 71%). This difference is also not statistically significant.

Table 5.38. Urbanity and Selection of Reference Group Members from the Same Village

Urbanity	Number of Reference Group Members from Same Village			N
	0-2	3-6	Total	
Urban	29.4	70.6	100.0	102
Rural	20.5	79.5	100.0	39

$$\chi^2 = 1.135 \quad df = 1 \quad p < .25 \quad N = 141 \quad \bar{c} = .140$$

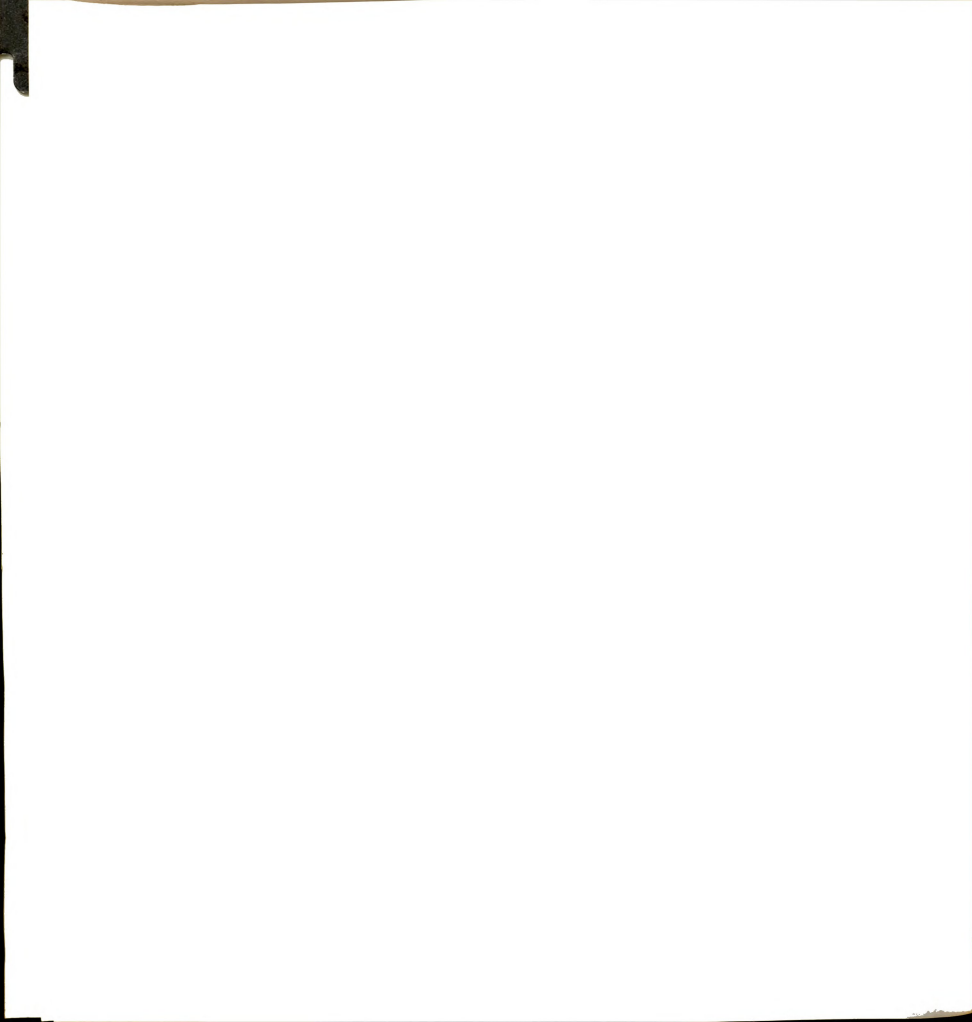
Next, we want to find out whether skill level makes any difference in the selection of reference group either by age or same village.

Table 5.39. Skill Level and Selection of Reference Group Members of the Same Age

Skill Level	Number of Reference Group of the Same Age				N
	0-2	3-4	5-6	Total	
Skilled	21.7	23.3	50.0	100.0	60
Semi-skilled	18.8	25.0	56.2	100.0	16
Unskilled	30.8	11.5	57.7	100.0	52

$$\chi^2 = 3.7 \quad df = 4 \quad p < .40 \quad N = 128 \quad \bar{c} = .228$$

When skill level is computed with selection of reference group by age, there does not seem to be a relationship that is statistically significant, which indicates that skilled workers are as likely to select reference group by age as are semi-skilled or unskilled workers. However, semi-skilled workers seem to select reference group members more by age, followed by skilled and unskilled workers.



Skill level does not appear to be significantly related to the selection of reference group members who are from the same village or kinship background. Skilled as well as semi-skilled or unskilled workers are likely to select reference group members from the same village.

Table 5.40. Skill Level and Selection of Reference Group Members from Same Village

Skill Level	0-2	Number of Reference Group Members from Same Village			N
		3-4	5-6	Total	
Skilled	21.3	23.0	57.7	100.0	61
Semi-skilled	25.0	25.0	50.0	100.0	16
Unskilled	30.8	15.4	53.8	100.0	52

$$\chi^2 = 2.0 \quad df = 4 \quad p < .60 \quad N = 129 \quad \bar{c} = .168$$

It will be necessary, once again, to state our position in order to make the necessary comparisons.

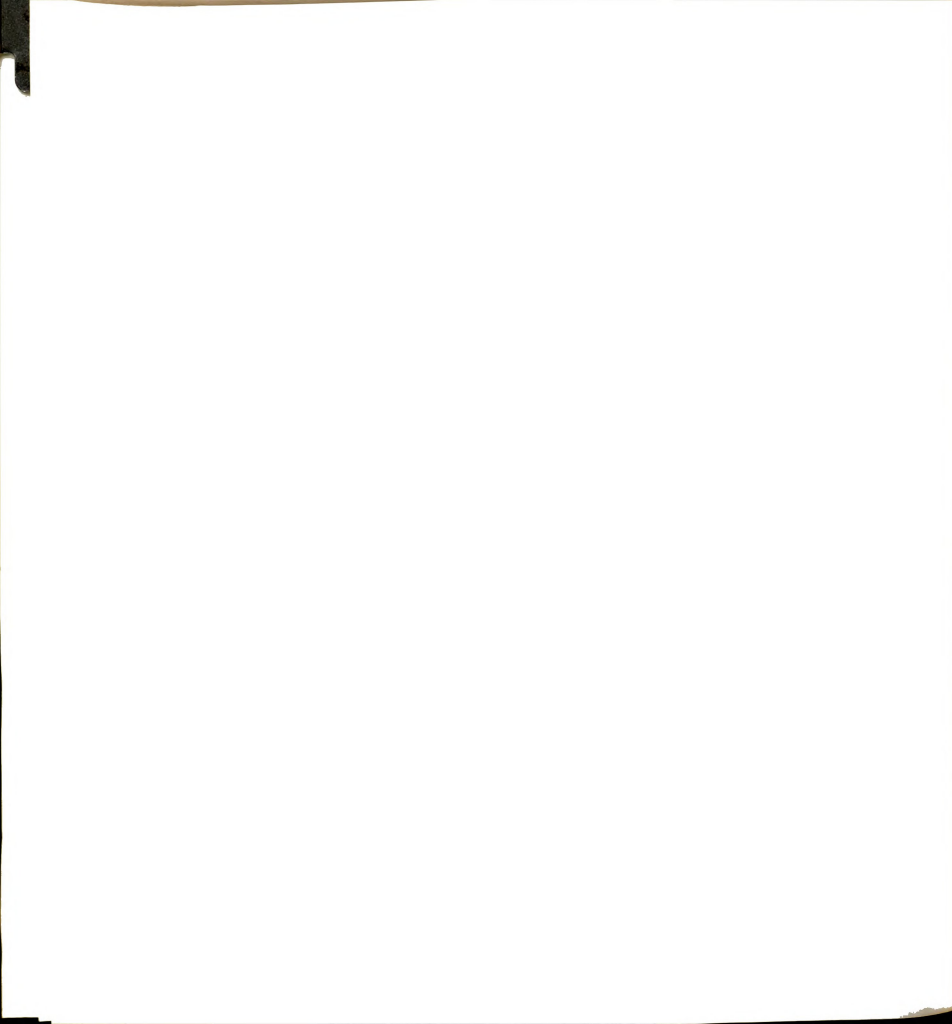
Paradigm

Sector and Job of Reference Group Members	Source of Reference Group	
	Traditional (Kin)	Industrial (Non-Kin)
Traditional	1. Initial Phase of Industrialization	4. (Inconsistent) Industrialization
Industrial	2. Intermediate Phase of Industrialization	3. Mature Phase of Industrialization

Figure 4. Paradigm for Reference Group Selection

With this paradigm in mind, we can infer from the preceding contingency tables that unskilled workers, who are less socialized into the industrial production process, are at the initial stages of industrialization and consequently select members of their reference group from traditional kinship members who are in non-industrial occupations. This was confirmed by Tables 5.35, 5.39, and 5.40. Skilled workers, on the other hand, even though they still select reference group members from traditional kinship members, tend to select those of them who are in industrial occupations. Thus, they tend to be at the intermediate stages of industrialization. Our data do not indicate any nearness to the third stage of mature industrialization where industrial rather than kinship ties, and industrial occupations provide the bases for reference group selection. Since industrialization is recent in Nigeria, skill level appears to be the best indication of industrial socialization. We would hypothesize that as Nigeria matures in industrialization, this shift in the selection of reference group members will occur. Unfortunately, none of the studies in mature industrial societies have focussed on this aspect with a resulting dearth of comparative data. Comparative studies of this nature are needed to establish both industrial commitment and also the stages of industrial development.

Finally, there is a dual relationship that emerges



from this approach. As workers become socialized to the processes of industrialization, they begin to apply industrial norms in selecting reference group members and, since such members are in the industrial sector, they in turn have the effect of further socializing the workers to industrial norms, thereby speeding up the process of industrial socialization.

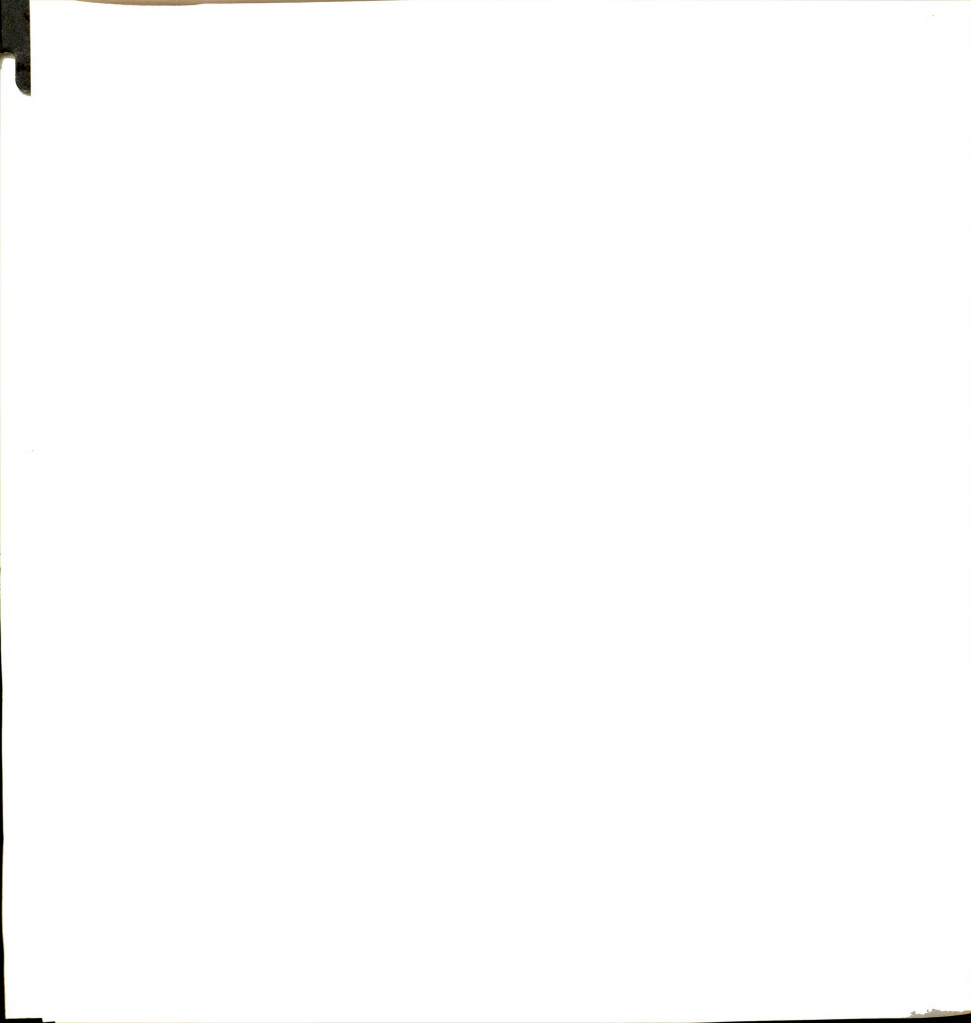
CHAPTER VI

SUMMARY, LIMITATIONS, AND AREAS FOR FUTURE INVESTIGATION

Summary and Implications

The main contribution of this study to the understanding of worker satisfaction derives from its use of reference group as a viable concept for assessing worker attitudes to work. In this sense, it constitutes a drastic departure from traditional worker satisfaction studies which deal with intrinsic satisfaction deriving from the functional or social division of labor or from certain posited personality characteristics. The meanings that workers give to work or derive from work do not only emanate from the technological division of functions, but primarily from the kinds of evaluations the workers make of the functions and positions of relevant others. It is this evaluation that puts the worker's position and function in context.

Satisfaction poses two alternative questions: satisfied relative to what? and satisfied relative to whom? Reference group neatly combines these two and answers both of them to the extent that it deals with satisfaction relative to the positions (which answers "relative to what?"), of significant others (which answers "relative to whom?"),



and therefore focusses on the symbolic social context of worker satisfaction. This study therefore concerned itself primarily with the significance of reference group in conditioning the kinds of meanings industrial workers derive from work. Since work is located in a sub-system of larger systems which are independently evaluated, these interlocking systems were also investigated.

In order to determine the significance of reference group theory to worker satisfaction, three factories in Nigeria were researched with a relatively small sample from a fourth factory. The total number of workers interviewed in the four factories was 142, but one interview was almost entirely discarded because the respondent expressed inability to understand the questions.

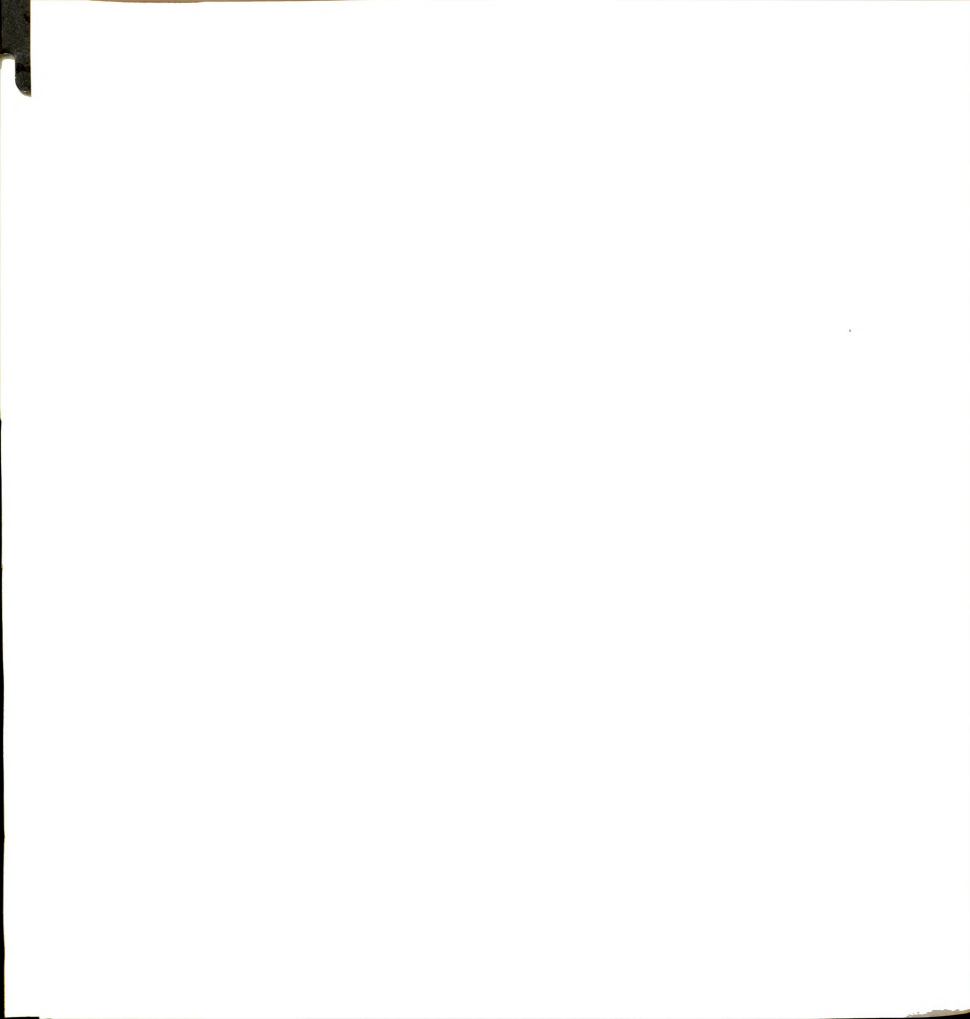
The analysis of worker attitudes to the sub-systems of work, occupation and sector, confirmed the assumption that worker satisfaction is conditioned by the evaluations the workers make of the positions and functions of significant others. This confirms the contention that reference group constitutes a useful and significant concept for the analysis of worker satisfaction. Thus, the study found that when workers felt that they were equally or better placed than members of their reference group, this tended to make them feel more satisfied with their work, occupation and sector of employment. On the other hand, when they felt that members of their reference group were more

highly placed than themselves, they tended to be less satisfied with their work, occupation, or sector of employment.

Skill level, which represents degrees of socialization into the industrial process, was also found to be significantly related to satisfaction with skilled workers being relatively more satisfied than unskilled workers. Even though skill level did not appear to be significantly related to work satisfaction, the percentage of skilled workers who are satisfied is slightly higher than unskilled workers (13% compared to 11%). However, semi-skilled workers have a much higher percentage of satisfied workers (35%).

Generally, the workers were more satisfied with their sector of employment than with the agricultural sector (74% to 26%). However, there appears to be an even split between satisfaction with the industrial sector and the service sector. Furthermore, about 55% of the workers seem to be satisfied with their occupation with 45% dissatisfied. Thus, when sector and occupational satisfaction are considered, the workers appear to be generally satisfied with both. Since this is so, we could hazard the assumption that there is a willingness to engage in industrial employment.

When satisfaction with work or the specific work task was investigated, only about 15% were found to be satisfied. This is relatively lower than 70%-80% of American factory workers who are generally satisfied with their



work.¹ However, considering the recency of the factory system in Nigeria, 15% satisfied workers represents a fairly healthy indication of a trend. Since satisfaction rises with skill level and general industrial development, we would expect that as skill levels increase and the society moves toward maturity in industrial production, general satisfaction with work will increase.

Urban residence was found to be related significantly to sector satisfaction, but neither to occupational or work satisfaction. Those of urban background were found to be more satisfied with the industrial sector than those of rural background.

When the question was asked, "Who are those selected as reference group members and where are they located?", it was found that neither skill level nor urban background was related to the selection of kin-related or traditional reference group members. Skilled or unskilled workers and those of urban or rural backgrounds were as likely to select kinship members as members of their reference group. Given the relatively low level of industrial development in Nigeria, this was predicted in that it is expected both

¹Robert Blauner, "Worker Satisfaction and Industrial Trends in Modern Society," in The Dynamics of Modern Society, William J. Goode (ed.) (New York: Atherton Press, 1966), p. 113. For a different view of the "satisfied worker" in the United States, see Harvey Swados, "The Myth of the Happy Worker," Nation, CLXXXV (August 17, 1957).

at the initial and intermediate phases of industrial development. However, when the occupational location of reference group members was probed, it was found that skilled workers were significantly more likely to select members of their reference group from the industrial sector than unskilled workers. Thus, the composition of the reference group shifts or changes with skill level or, as was predicted, with the level of socialization into the industrial production process, which may be interpreted as the process of industrialization. The significance of this finding rests in its developmental nature, which indicates a changing social environment for attitude formation and comparative behavior as societies develop in technological sophistication or industrial production. The location of these changing social environments will enable one to make certain predictions as to the kinds of attitudes toward work that will emerge.

Contrary to earlier studies in Africa, which indicated a relatively younger work population lower than thirty, we found the mean age of our sample to be about thirty-two years. This might be due to the fact that younger brothers tend to stay home to help out in farming or such functions, or go to school while the older brothers go out to seek industrial employment, possibly to help support other family members. However, with the new government programs on technical training and other educational schemes, we

would expect the mean age to drop gradually before beginning to rise again as industrialization progresses.

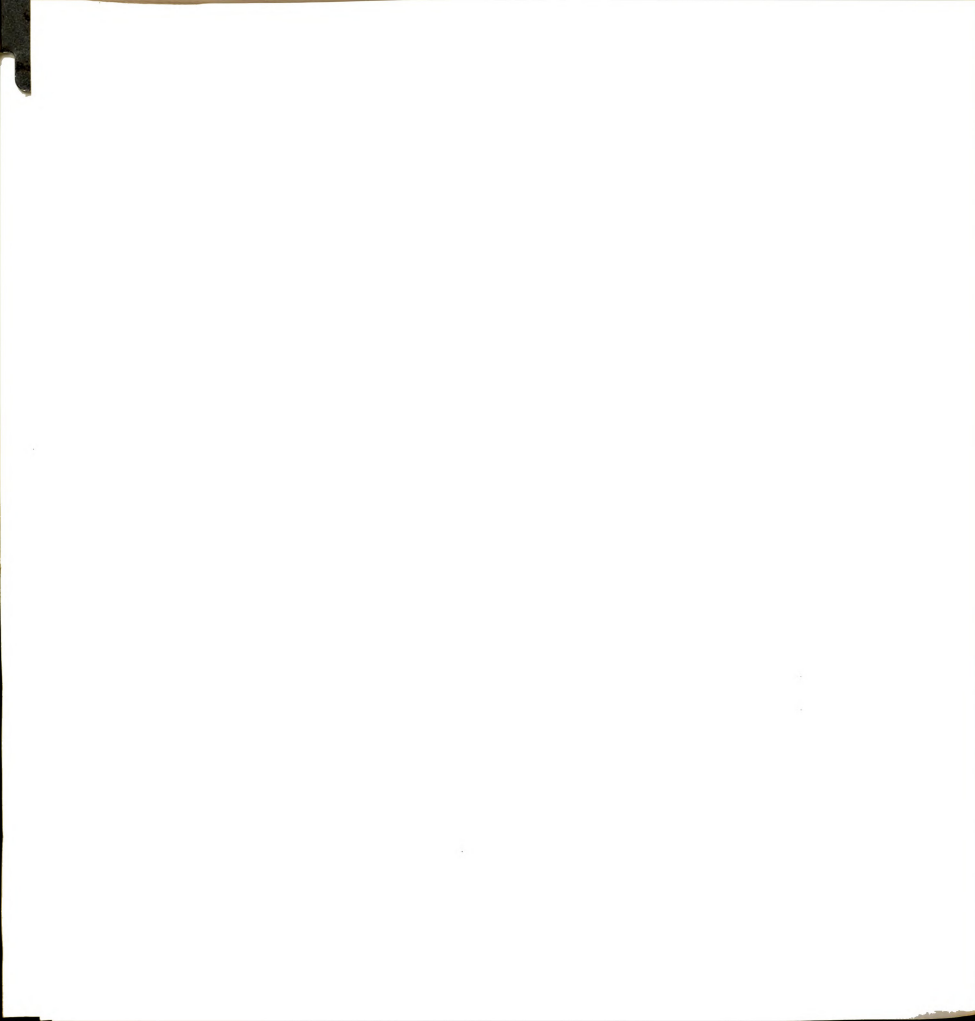
There seems to be a decline in the number of children born to the workers, as compared with those of their fathers. This generally supports the demographic transition theory. Finally, the mothers of the industrial workers were found to live longer than the fathers by about a one-to-four margin.

In terms of the need dispositions of the workers, the study found that unskilled workers and those of urban background tended to have an instrumental orientation with an emphasis on pay, while skilled and those of rural background tended to have an expressive orientation stressing expressive symbols like prestige and responsibility. On the whole, however, concern with pay tended to be the most prominent of all the concerns of the workers. The main implication here is that as the workers become more skilled, concern with pay or instrumental goals shifts to social prestige, life styles and general work conditions, or expressive goals. This has implications for management behavior in inducing adjustive behavior on the part of industrial workers.

Given the traditional nature of Nigerian society, this study contended that the discharge of traditional functions in terms of the degree of help given to traditional extended kinship family members would give the

worker a sense of well-being and would, therefore, induce a satisfactory attitude to work. Contrary to our expectation, this was not confirmed by the data. In fact, we found that those who have given help were equally as satisfied or dissatisfied with their work as those who have not given any help. Of those who have given help, 15.4% were satisfied, as compared to 15.9% of those who have not given help. We did not have any measures to tap why this is so. This should be an area for further investigation. However, when workers were asked whether their work helps them to meet their family obligations, 30% said it does, and 70% said it does not. Twenty percent of those who said it does were satisfied with their work, while 14% of those who said it does not were satisfied with their work.

Significant differences in the social characteristics of workers were found in the three main factories that were studied. In terms of the relationship between skill level and satisfaction with specific job tasks, Metal Construction--which has the highest percentage of skilled workers--appears to have the highest percentage of dissatisfied workers. Metal Containers, with the second largest percentage of skilled workers, were less dissatisfied. On the other hand, Bottling with the least percentage of skilled workers were least dissatisfied. The import of this seems to be the lack of relationship between skill level and satisfaction with specific job tasks. There were



also significant differences in age, level of education, rural-urban background and in the expressed feelings of relative deprivation in relation to members of reference group. Finally, there were significant differences in sector, occupational and work satisfaction.

The major implications of this study are both theoretical and practical. The contention is that work satisfaction derives from a feeling of relative deprivation in a comparative sense and that this feeling arises from a comparative interaction with reference group members. Thus, it enlarges the theory of reference group in its application and, therefore, enables us to understand the social sources of worker satisfaction. We were also able to indicate in this study the social and technological conditions under which we would expect shifts in the selection of reference group members. Furthermore, by the use of reference group we are implying linkages with the social sources of self formation and maintenance. These then are the general theoretical implications of this study.

On the practical side, the study will enable management to appreciate the kinds of differential reward systems suitable to different skill levels and stages of industrial development. To the extent that all workers expect some form of reward for the performance of their tasks, knowledge of the appropriate reward structure will help induce industrial commitment and possibly greater

productivity. In addition, knowledge of the social characteristics of workers will help management and union to make more meaningful decisions about workers and the processes of production. Finally, hopefully this study will sensitize workers to the factors operating in the context of industrial work and enable them to adapt better to industrial life. It will also, we hope, help management, union, and workers to work for better cooperation by being sensitive to the social conditions of work, and thereby tend to reduce industrial conflict.

Limitations of the Study

There are many limitations to this study. Since this research was organized under pressure and limited time, a number of significant questions were not raised and asked. For example, the extent of interaction with reference group members was not included in the interview, with the result that we are fairly unsure whether those named as members of reference groups for comparative purposes were reference individuals or ipso facto reference group members. This appears to be the gravest of all the limitations of the study and we hope to correct this defect in future studies.

Another limitation of the study is the fact that some areas important to our hypotheses were not probed. For example, the meaning of giving help to extended kinship members to the workers was not probed. If this were probed, it would have given us an insight into what produced

the situation where degree of help was not related to work satisfaction.

The selection of the factories for analysis was not random and, since there is the possibility of bias in the sample, inferences to the total working population in terms of its social characteristics can only be tentative. This restriction was, however, imposed by the vagaries of research such as the refusal by management to grant permission to conduct research in randomly selected industries. Time also imposed its own restrictions, which made it difficult to extend the research to include other industries.

With these limitations in mind, the injunction caveat emptor becomes very appropriate in interpreting or extending the findings. Thus, caution is required in the extended interpretation of the data and findings.

Areas for Further Investigation

The areas for further investigation follow naturally from the limitations of this study. One area for further research would be the replication of the same study with a larger sample randomly selected from all or a substantially larger number of industrial workers. This would give a more reliable structure of the social characteristics of industrial workers in Nigeria. It would further help to test the reliability and utility of the application of reference group theory to worker satisfaction. On the other hand, the same research and

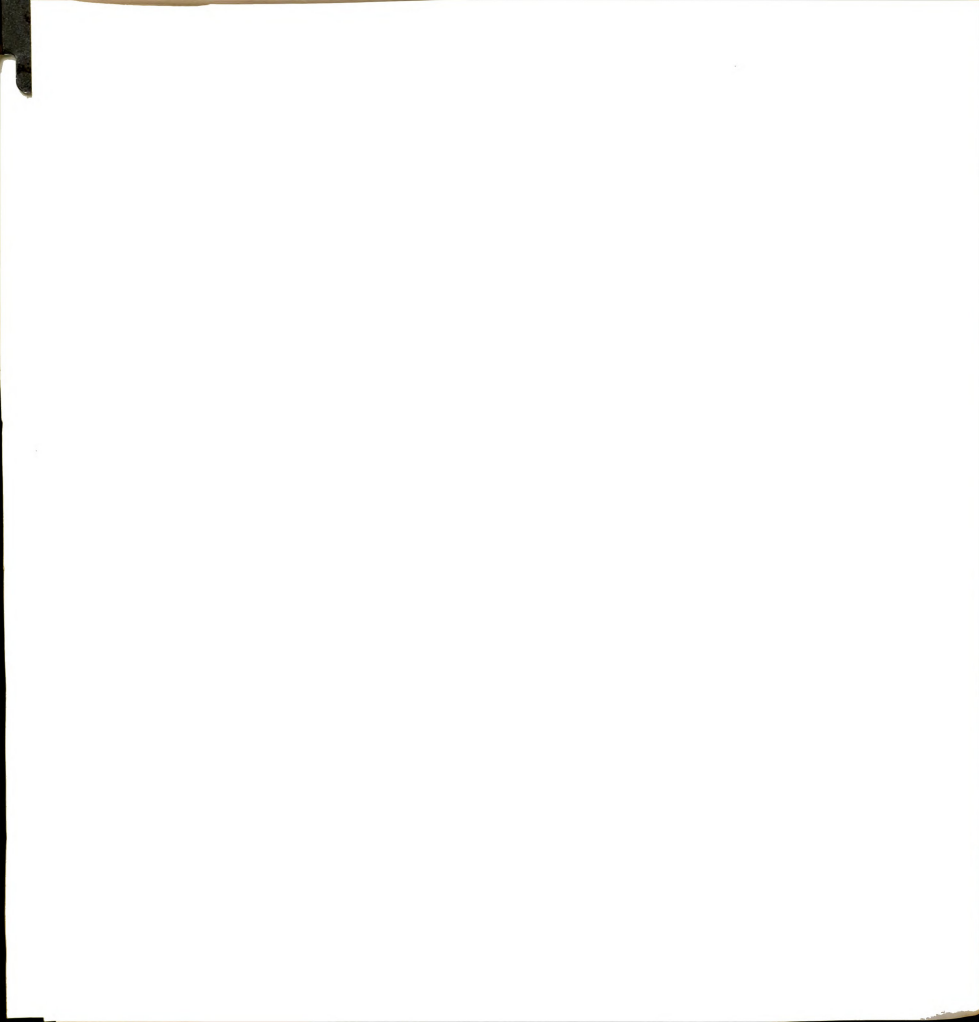
instrument could be replicated in other factories in societies with varying degrees of industrialization, to test both the theory, instrument and findings.

A further area for investigation would be a comparative study of industries located in rural and urban areas to see if the general social climate has any relation to the level of industrial satisfaction.

Another question that merits investigation is the location of the central life interests of industrial workers to see if reference group has any implications for such life interests. To the extent that reference group is significant to self maintenance and socialization into normative patterns, central life interests should derive from such groups. This will enable us to understand the social sources of life interest formation and maintenance.

The patterns of aid-giving to members of extended family members may also be investigated in depth for an understanding of the meanings given to aid-giving. If aid-giving is meaningful to workers, it must implicate them to certain patterns of behavior. Such patterns of behavior should be investigated.

Finally, it will be necessary to conduct both longitudinal and comparative studies to understand the developmental patterns that emerge. Such comparative studies, of course, should include comparison with other developing and also with industrially developed societies. This will



give a better test of the shifting sources of reference group selection. Comparative cross-cultural data are becoming available, but it will require systematic analysis with reference group behavior as the focal point. The future prospects for such studies appear to be promising.



BIBLIOGRAPHY

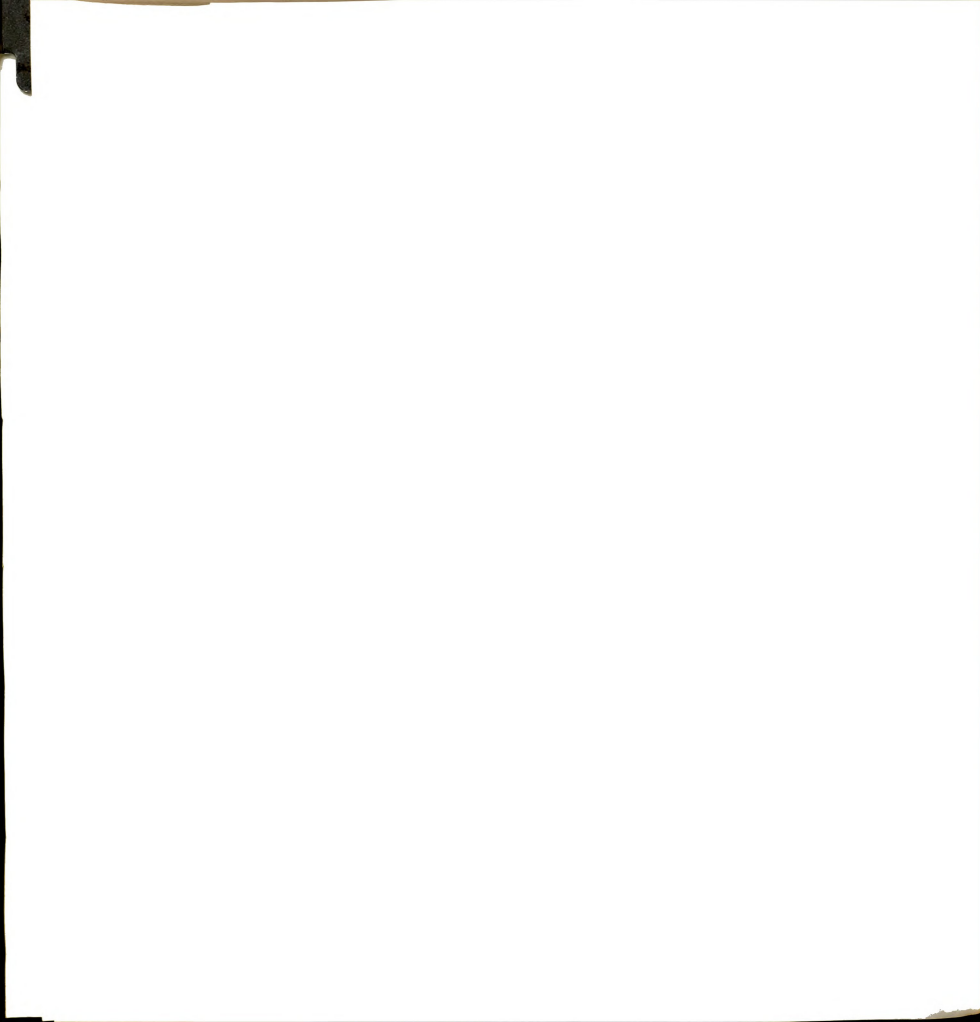
- Aboyade, Ojetunji. Foundations of an African Economy: A Study of Investment and Growth in Nigeria. New York: Frederick A. Praeger, 1966.
- Agarwala, A. N., and Singh, S. P. (eds.). The Economics of Underdevelopment. New York: Oxford University Press, 1963.
- Ashby, Eric. African Universities and Western Tradition. Oxford University Press, 1964.
- Balandier, George. "Urbanism in West and Central Africa: The Scope and Aims of Research," in International African Institute, Social Implications of Industrialization and Urbanization in Africa South of the Sahara (prepared under the auspices of UNESCO). Paris: UNESCO, 1956.
- Bauer, P. T. Economic Analysis and Policy in Underdeveloped Countries. London: Routledge & Kegan Paul, Ltd., 1966.
- Bell, Evelyn M. "Polygons Part Two: A Study of Labour Turnover," Occasional Paper No. 3, Dept. of African Studies. Salisbury, 1963, University of Rhodesia, Nyasaland.
- Bispham, W. M. L. "The Concept and Measurement of Labour Commitment and Its Relevance to Nigerian Development," Nigerian Journal of Economic and Social Studies, Vol. 6, No. 1, March, 1964.
- Blauner, Robert. Alienation and Freedom: The Factory Worker and His Industry. University of Chicago Press, 1964.
- Blauner, Robert. "Worker Satisfaction and Industrial Trends in Modern Society," in The Dynamics of Modern Society, William J. Goode (ed.). New York: Atherton Press, 1966.
- Buchanan, K. M., and Pugh, T. C. Land and People in Nigeria. London: University of London Press, 1955.



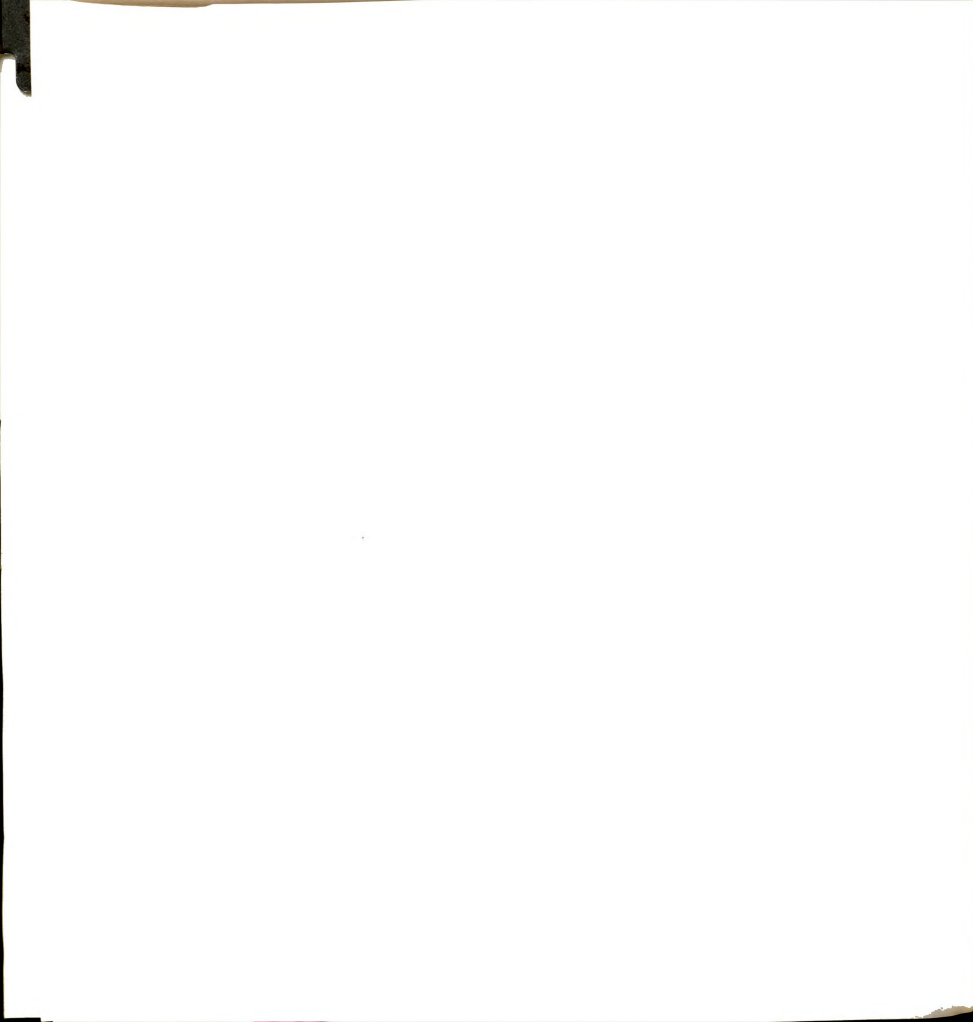
- Chapman, D. W., and Volkmann, John. "A Social Determinant of the Level of Aspiration," in E. E. Maccoby, T. M. Newcomb and E. L. Hartley, Readings in Social Psychology. New York: Henry Holt & Co., 1958, 3rd edition.
- Chinoy, Ely. Automobile Workers and the American Dream. Garden City, N.Y.: Doubleday Co., 1955.
- Clark, Colin. The Conditions of Economic Progress, 3rd edition. London: Macmillan, 1957.
- Cooley, Charles H. Human Nature and the Social Order. Glencoe: The Free Press, 1922, revised ed.
- Daily Times (of Nigeria), March, 1965, July 24 and July 26, 1965, articles by Adisa Adeleye.
- Daily Times (of Nigeria), July 15, 1965, p. 14, and July 27, 1965, pp. 7-9.
- Davis, Kingsley. "Urbanization and the Development of Pre-Industrial Areas," Economic Development and Cultural Change, 3, October, 1954.
- Economic Development of Nigeria. Report of the I.B.R.D., Federal Government Printer, 1954.
- Economic Survey of Nigeria, 1959. Federal Government Printer, Lagos.
- Eisenstadt, S. N. "Studies in Reference Group Behavior," Human Relations, 7, 1954.
- Elias, T. O. The Impact of English Law on Nigerian Customary Law (Lugard Lectures). Lagos: CMS (Nigeria) Press, 1956.
- Elkan, W. "The Persistence of Migrant Labour," Bulletin of Inter-African Labour Institute, September, 1951.
- Elkan, W., and Fallers, Lloyd A. "The Mobility of Labor," in W. E. Moore and A. S. Feldman, Labor Commitment and Social Change in Developing Areas. New York: Social Science Research Council, 1960.
- Faunce, William A. "Automation and the Automobile Worker," Social Problems, 6, 1 (Summer, 1958).
- Federal Republic of Nigeria: Annual Abstracts of Statistics, 1964. Federal Office of Statistics, Lagos.



- Form, William H. "A Bargaining Model of Social Research," unpublished manuscript, Michigan State University.
- Form, William H., and Geshwender, James A. "Social Reference Basis of Job Satisfaction: The Case of Manual Workers," American Sociological Review, Vol. 27, No. 2, April, 1962.
- Fortes, Meyer, and Evans-Pritchard, E. E. "African Political Systems," in Morton H. Fried (ed.), Readings in Anthropology, Vol. II. New York: Thomas Y. Crowell Co., 1960.
- Fox, J. B., and Scott, J. F. Absenteeism: Management's Problem. Boston, Mass.: Harvard University: Graduate School of Business Administration, 1943.
- Garigue, Philip. "French Canadian Kinship and Urban Life," American Anthropologist, LVIII, Dec., 1956.
- Goode, W. J., and Hatt, P. K. Methods in Social Research. New York: McGraw-Hill Book Co., Inc., 1952.
- Greenfield, Sidney M. "Industrialization and the Family Sociological Theory," in Kinship and Family Organization, Bernard Farber (ed.). New York: John Wiley & Sons, Inc., 1966.
- Hatt, Paul K. "Occupations and Social Stratification," in Sigmund Nosow and William H. Form, Man, Work and Society. New York: Basic Books, Inc., 1962.
- Hoppock, R. Job Satisfaction. New York: Harper, 1935.
- Hughes, Everett C. "Personality Types and the Division of Labor," American Journal of Sociology, Vol. 33.
- Hyman, H. H. "The Psychology of Status," Archives of Psychology, No. 269, 1942.
- James, William. Principles of Psychology. New York: Henry Holt & Co., 1890.
- Johnson, Erwin. "The Stem Family and Its Extensions in Modern Japan" (paper presented at the Annual Meeting of the American Anthropological Association, Minneapolis, Minnesota).
- Kelly, Harold H. "Two Functions of Reference Groups," in A. E. Swanson, T. M. Newcomb and E. L. Hartley, Readings in Social Psychology. New York: Henry Holt & Co., 1952.



- Kendal, M. G. The Advanced Theory of Statistics. London: Charles Griffin & Co., 1945.
- Kerr, Clark, Dunlop, John T., Harbison, Frederick, and Myers, Charles A. Industrialism and Industrial Man: The Problems of Labor and Management in Economic Growth. Cambridge, Mass.: Harvard University Press, 1960.
- Kerr, Clark, and Fisher, Lloyd H. "Plant Sociology: The Elite and the Aborigines," in Mira Kamorovsky (ed.), Common Frontiers of the Social Sciences. Glencoe: Free Press, 1957.
- Kornhauser, Arthur. "Psychological Studies of Employee Attitude," Journal of Consulting Psychology, 8, August, 1944.
- Magistretti, Franca. "Sociological Factors in the Structuring of Industrial Workers' Teams," American Journal of Sociology, LX, May, 1955.
- March, James G., and Simon, Herbert A. Organizations. Graduate School of Industrial Administration, Carnegie Institute of Technology, 1959.
- Marx, Karl. Economic and Philosophical Manuscripts of 1844. Moscow: Foreign Languages Publishing House.
- Mayo, Elton. The Human Problems of an Industrial Civilization. New York: Viking Press, 1960.
- Mayo, Elton. The Social Problems of an Industrial Civilization. Cambridge, Mass.: Harvard University Press, 1945.
- McCormick, T. C. Elementary Social Statistics. New York: McGraw-Hill, 1941.
- Mead, George Herbert. Mind, Self and Society. Chicago: University of Chicago Press, 1934.
- Merton, R. Social Theory and Social Structure. Glencoe, Ill.: The Free Press, 1957.
- Metal Containers of West Africa, Ltd.: Conditions of Service, January, 1963, no publisher.
- Miller, Delbert C., and Form, William H. Industrial Sociology: The Sociology of Work Organizations. New York: Harper & Row, 1964, 2nd edition.



- Morse, Nancy C., and Weiss, Robert S. "The Function and Meaning of Work," American Sociological Review, XX, 1955.
- Nash, Manning. "Kinship and Voluntary Association," in Wilbert E. Moore and Arnold S. Feldman, Labor Commitment and Social Change in Developing Areas. New York: Social Science Research Council, 1960.
- National Development Plan 1962-68. Federal Government of Nigeria, 1963.
- Newcomb, T. M. "Attitude Development as a Function of Reference Groups: The Bennington Study," in E. E. Maccoby, T. M. Newcomb and E. L. Hartley, Readings in Social Psychology. New York: Henry Holt & Co., 1958, 3rd edition.
- Okigbo, Pius N. C. Nigerian National Accounts 1950-57. Federal Ministry of Economic Development, Lagos, 1962.
- Onyemelukwe, C. C. Problems of Industrial Planning and Management in Nigeria. London: Longmans Green & Co., Ltd., 1966.
- Palmer, Gladys. "Attitudes to Work in an Industrial Community," American Journal of Sociology, LXIII, 24, 1957.
- Parsons, T. The Structure of Social Action. Free Press of Glencoe, 1949.
- Patchen, Martin. "The Effects of Reference Group Standards on Job Satisfaction," Human Relations, Vol. XI, No. 4, 1958.
- Peters, C. C., and VanVoorhis, W. R. Statistical Procedures and Their Mathematical Bases. New York: McGraw-Hill, 1940.
- Popper, Karl R. Logic of Scientific Discovery. New York: Harper & Row, 1964.
- Popper, Karl R. The Poverty of Historicism. New York: Harper & Row, 1964.
- Prothero, R. Mansel. "The Population Census of Northern Nigeria 1952, Problems and Results," Population Studies, X, November, 1956.



Purcell, Theodore. The Worker Speaks His Mind on Company and Union. Cambridge, Mass.: Harvard University Press, 1954.

Review of External Trade, Nigeria, 1963. Federal Office of Statistics, Lagos.

Sherif, Muzafer, and Sherif, Carolyn W. An Outline of Social Psychology. New York: Harper and Brothers, 1956.

Shibutani, Tamotsu. Society and Personality. Englewood Cliffs, N.J.: Prentice-Hall, 1961.

Shister, Joseph, and Reynolds, Lloyd. Job Horizons. New York: Harper & Brothers, 1949.

Siebel, Dieter H. "Industrial Labour in Nigeria," unpublished thesis, Universities of Ibadan, Nigeria, and Freiburg, Germany.

Swados, Harvey. "The Myth of the Happy Worker," Nation, CLXXXV, August 17, 1957.

Taylor, Frederick W. "A Piece Rate System Being a Step Toward Partial Solution of the Labor Problem," A.S.M.E. Transactions, Vol. 16, 1895.

The Demographic Yearbook of the United Nations, 1957.

"Town Planning," a report given at the 2nd session of the Inter-African Conference on Housing and Urbanization, CCTA/CSA L. (59), p. 23, Nairobi, Feb. 13, 1959 (Mimeographed).

Turner, Ralph H. "Role-taking, Role Standpoint and Reference Group Behavior," American Journal of Sociology, LXI, 1956.

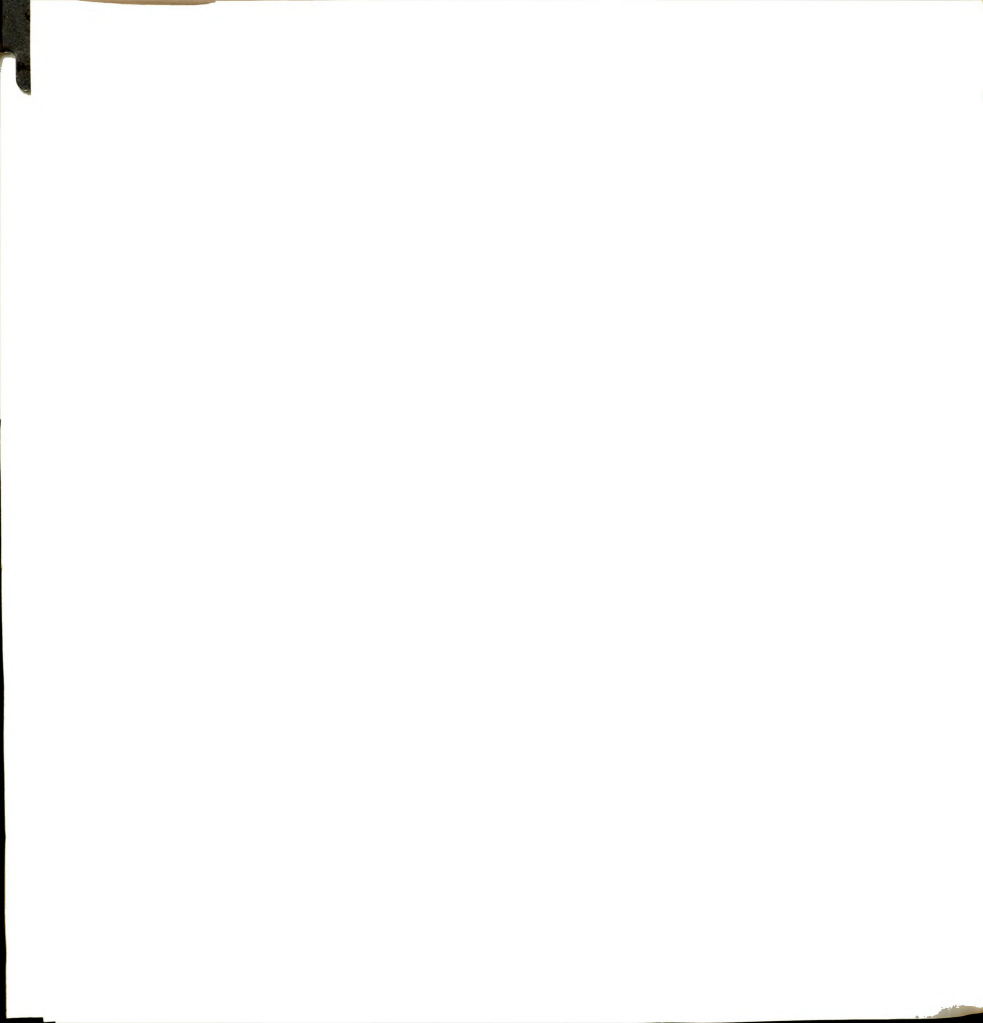
United Nations Demographic Yearbook, 1952.

Walker, C., and Guest, R. H. The Man on the Assembly Line. Cambridge, Mass.: Harvard University Press, 1952.

Western Nigeria Development Plan, 1962-68. Government Printer, Ibadan.

Zaleznik, A., Christensen, G. R., and Roethlisberger, F. J., with Homans, George. The Motivation, Productivity, and Satisfaction of Workers: A Prediction Study. Cambridge, Mass.: Harvard University Press, 1952.

APPENDIX A



APPENDIX A

SOME BACKGROUND VARIABLES AND TENTATIVE PROBES INTO DEMOGRAPHIC TRANSITION THEORY

Father's Occupation

Distribution of Father's Occupational Background

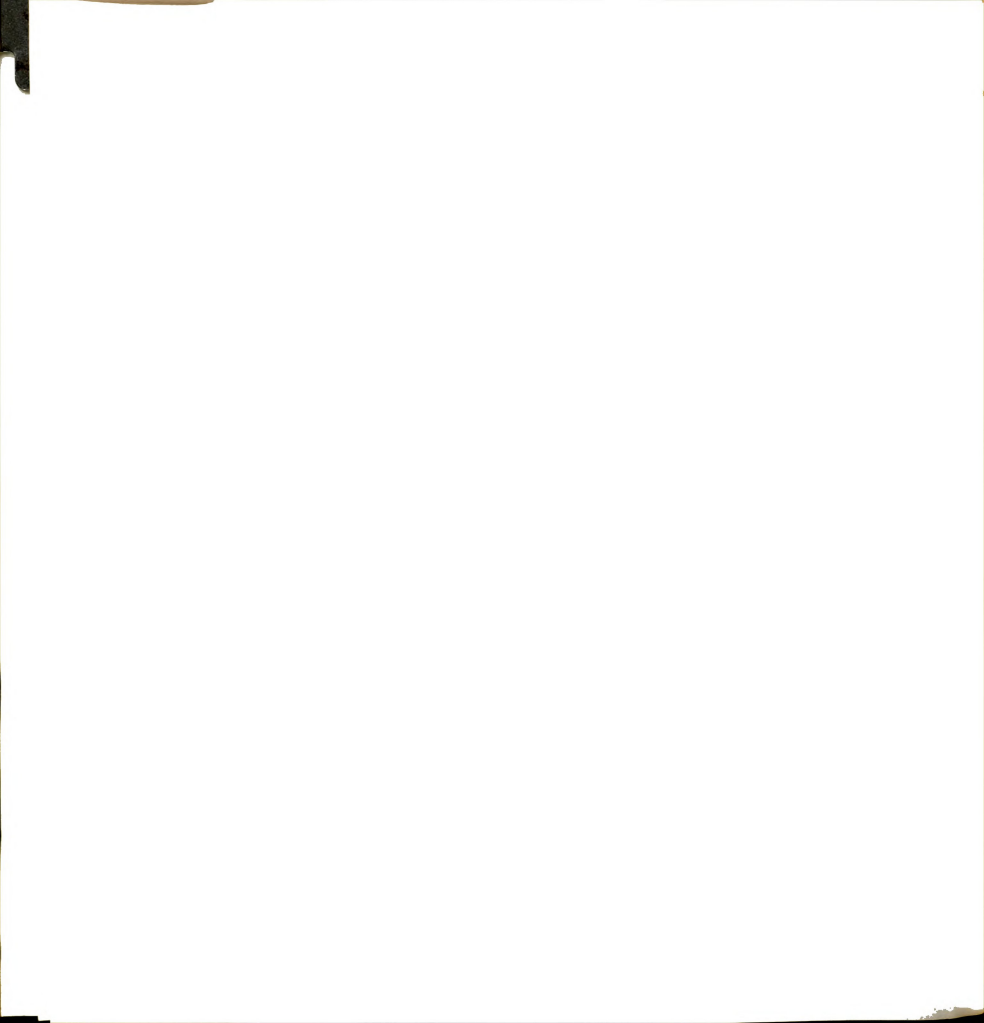
<u>Occupation</u>	<u>Percent</u>	<u>(N)</u>
Unemployed	2.8	4
Domestic Service	2.1	3
Farmer	62.0	88
Trader	13.4	19
Industrial	10.6	15
Clerical	4.2	6
Others ¹	<u>4.9</u>	<u>7</u>
Total	100.0	142

A little over three-quarters of the workers have their fathers in farming and trading. Only about one-fifth of the fathers are in what may be described as industrial-bureaucratic occupations.

Distribution of Age

<u>Age</u>	<u>Percent</u>	<u>(N)</u>
16-25 years	21.1	30
26-35	53.5	76
36-45	18.3	26
Above 45	<u>7.1</u>	<u>10</u>
Total	100.0	142 $\bar{X} = 32$ approx.

¹These include three traditional chiefs, one priest, and three don't know.



This distribution tends to refute earlier studies in Africa that the mean age is between 26 and 29.¹ First, we must admit that there is a strong reluctance among Nigerian industrial workers to disclose their ages, mainly for fear of leaving their jobs before they are ready to leave. There is also the problem of unrecorded births, which tends to compound the problem. There is the case in our study of a sixty-year-old worker who, when faced with the question of retirement, went to court to declare a lower age and made the local trade union fight his case to stay on. The management accepted his new age and allowed him to continue working. It is, therefore, very misleading to use records in the plants, as these are very unreliable.

In our study, we used two approaches. We spent a lot of effort in explaining to workers that whatever they told us would be treated with the utmost confidence and that being a fellow Nigerian we could not use whatever they told us against them with the management. This approach seemed to work because a number of the workers told us confidentially that the ages they declared for management were not their actual ages. They said they were using

¹Siebel, op. cit. See also Elkan and Fallers, op. cit., p. 24. It could be argued that such differences may be due to sampling errors. There is, however, a tendency in these studies to characterize the labor force in developing countries in general and in Africa in particular, as young.

what they called "work age" because management has a tendency of employing younger men and that they want to work until they feel they are ready to retire. Furthermore, we asked workers to estimate the age they started to work and then to indicate job changes and the years of change. We cross-checked with the ages they have given us and, if there was a discrepancy, we confronted them with this at the end of the interview. This tended to make for better recall. We are not claiming that our approach is foolproof, but under the circumstances we are confident that it is a better estimate of the age structure of the working population than earlier studies.

However, we would expect that as government policies of establishing trade schools and other such measures begin to take full effect, the age structure will drop to be younger and then rise again with mature industrialization. We would expect this pattern in all developing societies because at the initial stages of industrial development it is easier for older brothers to move into industrial employment than younger siblings. This trend was confirmed by our sample where about 28% are first-born sons, 18% second-born, and 14% third-born. With the mean number of siblings being eight, the first three children have about a 60% chance of entering industrial employment. This also refutes Siebel's assertion that the older ones stay home while the young go out to seek industrial or

urban employment. Indeed, it is even possible for older brothers to take up industrial employment so as to be able to help younger brothers go through grade or high school.

We cannot make any inferences to the total Nigerian population, but we can infer from the tables below that the workers in our sample will have fewer children than their parents. Our estimate from the 1952-53 Nigerian census is that the life expectancy in Nigeria is about 55 years.¹ We would expect that in the remaining years the industrial worker might not have five more children, also considering the fact that mean number of wives in our sample is about 1.2.² There is no estimate of the number of wives per man in the total population, but our hunch is that the number of wives per parent of the industrial workers will be about two or a little more. Thus, we will expect, as industrialization progresses, a relative

¹Annual Abstract of Statistics, 1964, op. cit., p. 13, Table 2.2. Furthermore, our nearest estimate is from the question dealing with parents alive. About two-thirds in our sample have either one or both parents dead. If we can assume that these parents started having children between 20-25 years, with our mean of 32 for the workers, we may assume a life expectancy between 50 and 58. The distribution was: both parents alive, 35%; mother alone alive, 35%; father alone alive, 10%; both parents dead, 20%. It appears from our sample that women seem to live longer than men, which is true for a number of other countries. The findings here are very tentative and must be viewed in this light.

²Of those who are married, 76% have one wife while 24% have two wives. None of the workers have more than two wives.



decrease in the number of children born to each father to appear. Our unsupported estimate is that at the present time the bulge of the demographic gap is fairly large, indicating a decreasing death rate with malaria control and other medical facilities, without a corresponding decrease in the birth rate. There is a great degree of tentativeness to these assertions. Further research is needed to map out clearly the demographic structure of the industrial working population.

Distribution of Marital Status

<u>Marital Status</u>	<u>Percent</u>	<u>(N)</u>
Single	31.0	44
Married	68.3	97
Divorced/Separated	<u>.7</u>	<u>1</u>
Total	100.0	142

Distribution of Number of Children

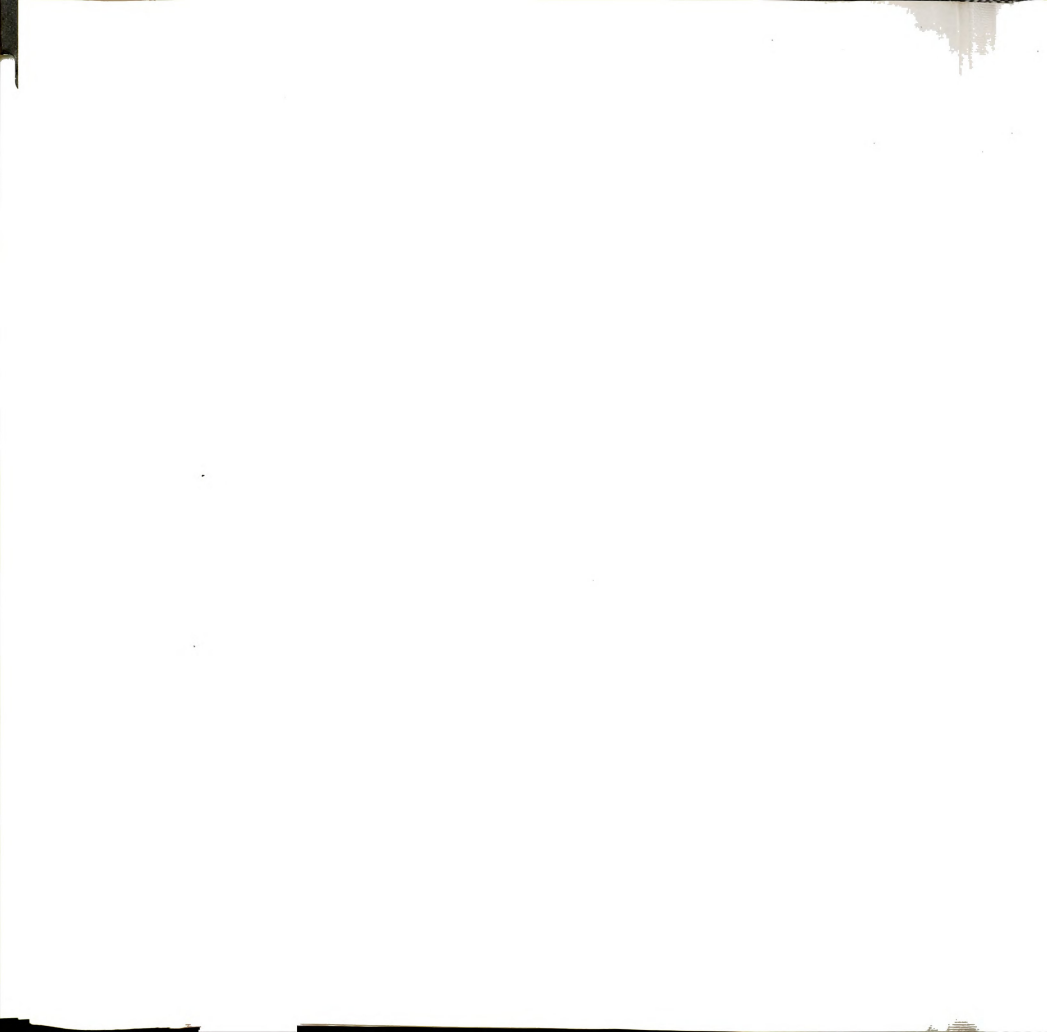
<u>Number of Children</u>	<u>Percent</u>	<u>(N)</u>
1 child	9.9	14
2-3 children	29.6	42
4-5	15.5	22
Above 6	9.1	13
None	<u>35.9</u>	<u>51</u>
Total	100.0	142

$$\bar{X} = 3.3^1$$

¹The mean is computed only for those with children and does not include the 51 cases without children.







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