EVALUATION OF LOCAL PLANTS AS PLACES
TO WORK BY THE MALE
WAGE-EARNERS OF A MIDDLE-SIZED INDUSTRIAL
COMMUNITY

Thesis for the Degree of M. A.

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Paul Raymond Vaughan

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EVALUATION OF LOCAL PLANTS AS PLACES TO WORK BY THE MALE WAGE-

EARNERS OF A MIDDLE-SIZED INDUSTRIAL COMMUNITY

by

Paul Raymond Vaughan

AN ABSTRACT

Submitted in partial fulfillment of the requirements for
the degree of Master of Arts in the Department of Soc-
iology and Anthropology in Michigan State University

East Lansing, Michigan

1959

Approved *William H. Form*

A sample of 583 male, manual workers was taken from the Lansing labor force and examined for this study. An attempt was made to determine how they rated local plants as places to work. First, the data were analyzed to determine which plants were rated as the best and as the worst and the order in which they were ranked. The largest plant, Oldsmobile was found to be rated the highest followed by Motor Wheel, Reo Motors, and Fisher Body, in that order. The forges and foundries were rated worst as places to work. However, they were rated high by their own employees.

The first hypothesis that workers from small, locally owned, non-manufacturing plants would rate their plants higher than large, absentee owned, manufacturing plants was not upheld. In fact, the reverse was found to be true. The explanation for this seems to be that the large, absentee owned, manufacturing plants can pay higher wages and provide better working conditions.

The second hypothesis that the largest plants in terms of number of employees would be named most often as the best places to work was upheld even after making correction for difference in size of the plants. Fisher Body, which rated lower than expected was an exception and points to the fact that large size does not automatically bring a plant high reputation. Plants must be managed in such a way that their employees are satisfied with the programs

and policies.

It was hypothesized that workers rate the plants in their community as places to work with the same criteria that they use to rate their jobs. The criteria used in common partially supporting this hypothesis were the most important criteria: working conditions, wages, steady employment, and good human relations. However, there were some additional criteria used only to rate jobs and others used only to rate plants.

The next section focused on the workers ranking of their own plants. It was hypothesized that workers with high job satisfaction tend to evaluate plants where they work more highly than workers with low job satisfaction. This hypothesis was statistically supported. The final hypothesis was that plants would be rated differently by workers with varying social backgrounds. The background characteristics were grouped into demographic variables, age, birthplace, and marital status; labor market variables, number of years in the Lansing labor market, time employed by present concern, number of companies worked at 1940-1951, and union membership; and stratification variables, education, income, and occupational level. Results of chi-square tests indicated that marital status, union membership, and occupational level is associated with the way in which the workers rate their own plants. There are indications that workers who rate their own plants low show a greater degree

of association between social background characteristics and the way in which they rate their plants. Further research might show this to be true.

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ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION AND THEORETICAL SIGNIFICANCE

In present day American society the job which a person holds is of great significance. A person's job determines the status which he has and influences the type of life which he can lead. Therefore the worker is concerned about the type of job which he holds and also about the type of employer for which he works. Moreover workers commonly evaluate the local plants while seeking employment. They rate a plant as a good or a bad place to work based upon their previous work experiences and upon what they have heard from fellow workers. This evaluation of local work plants is a subject about which little is known. Due to the importance of work and place of work the historical evaluation of community plants is considered an important area for sociological investigation.

The relationship between the institutions of work and social life has long been recognized. More than fifty years have passed since Durkheim published his thesis demonstrating that interdependence between men in industrial society increases with the division of labor. Based upon comparative studies of other societies Durkheim maintained that occupational associations will develop along with complex industrial systems. These associations, he held, would assume many non-economic functions which, when combined with the economic functions, would provide norms for

the society and prevent a condition of anomie, a societal state characterized by an absence of common values, sentiments, and social norms.[1]

There are some trends in American society today which support Durkheim's prediction that economic associations tend to assume non-economic functions. For example business establishments are devoting increased time and effort to support and influence community educational systems. Currently many industrial leaders feel that in order to operate their plants with minimum friction they need to have a favorable public image. To obtain adequate municipal services and a qualified labor force industry may find it helpful to be regarded as a "good community citizen." Such a reputation can be assured by keeping informed about their community image and taking an active part in community affairs. Some companies make a systematic effort to obtain representation on all types of community boards, commissions, and committees.

This is all a part of the growing public relations movement. Businessmen who have spent many years in building a favorable community image of their industry are convinced that the good labor recruitment, brand loyalty, and consumer loyalty is a function of their efforts to build a good reputation.[2] According to John W. Welcker a management

[1]Emile Durkheim, The Division of Labor in Society, Translated by George Simpson, The Free Press, 1947.

[2]William H. Form and Delbert C. Miller, Industry and Community, Chap. 4, p. 29, Unpublished manuscript, Harper and Brothers, forthcoming, 1960.

which is successful in maintaining good community relations not only improves the company's internal operations, but also strengthens the reputation of industry as a whole throughout the nation.[3]

General Review of the Literature

The present study is concerned with evaluations which manual workers in a middle-sized city make of local firms as places to work. Very little has been done to study systematically the community reputations of firms and employers. In his study of Illini City, Wray asked samples of the public, union members, and employers, six general questions concerning the reputations of six major companies and the unions with which they dealt. He found that respondents generally tended to have clearer attitudes toward the largest companies and unions. They tended to have positive attitudes toward organizations about which they know the most.[4]

Roper conducted a study for _Fortune_ in Terre Haute, Indiana, to find out which of the leading industrial companies in town were "good neighbors" and why. He found that a good product at a reasonable price does not automatically

[3]John W. Welcker, "The Community Relation Problems of Industrial Companies," _Harvard Business Review_, November, 1949, p. 730.

[4]Donald E. Wray, "The Community and Labor-Management Relations," _Labor-Management Relations in Illini City_, Institute of Labor and Industrial Relations, Champaign, University of Illinois, 1953, p. 122-124.

result in public favor for the company. The company is looked upon as a citizen and neighbor and is judged the same as other members of society. One company was well known for doing things for the community, but was not rated very high as an employer. The best company in Terre Haute did not pay the best wages or build the most playgrounds, but it did create the most opportunities.

The people were asked how they felt about the ten leading industries as places to work and why they felt the way they did. They were given a list of criteria and asked to choose two or three of the most important for picking a company to work. Table I shows the results obtained.[5]

Terre Haute is large enough to have important and diverse industry and yet small enough so people are familiar with the firms in town. Yet a significant finding was that two-thirds of the respondents could not name a best plant to work for in Terre Haute. On the other hand, four-fifths indicated that they did not know a worst company or that there was no worst company. One company was named by one-third of the remaining twenty percent as worst because of low wages. Respondents could not or would not derogate firms except for failure to provide steady employment. In general companies were rated high because they provided

[5]Roper, "The Fortune Survey," _Fortune_, March, 1950, p. 40.

TABLE I

REASONS GIVEN FOR SELECTING A PLACE TO WORK[*]

Reasons	Percentages
Steadiness of Employment	50
Chance for Advancement	48
Level of Wages	37
Working Conditions	33
How Well Firm Takes Care of High Seniority Employees	32
Attitude Toward Labor Unions	23
Relations With Boss	9
Relations With Fellow Workers	9
No Opinion	8
Number of Respondents	Not given

[*] From Roper.

steady employment, chance for advancement, good wages and
good working conditions.

General Electric conducted surveys to appraise the
community reputations of some of their plants. Its manage-
ment has indicated that General Electric can exist only as
long as the public allows it. They believe that they cannot
attract and hold the best employees, have mutually rewarding
relations with them and otherwise achieve good over all
operations unless they deserve, seek, and get good community-
wide understanding and approval of their policies and activ-
ities. General Electric has set up standards for a company
to be rated as a good employer, a good neighbor, and a good
citizen. The reason for the corporation's concern with this
problem of plant reputation stems from the results of a
survey taken during a strike in 1946. They found that the
mayor, the city council, the clergy, the newspaper, and
local merchants felt that the strike was justified, that
employees were not paid well, that prices were kept as high
as possible by G.E., and that the company's motives were
dishonest and contrary to public interest.[6]

The results of the strike surveys and the comments
of its neighbors in the cities where the plants were located
indicated that General Electric needed a strong, well-planned
community relations program. First the company reviewed its
previous activities in the communities. For a half century

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[6]General Electric Publications, ERV-2A, 1955,
pp. 5-8, pamphlet directed toward professional managers in
the corporation.

it had felt secure in the knowledge that, measured against accepted standards, it ranked high as a good employer. The wages, working conditions, benefit programs, the community participation of management, and company contributions to human needs, small businesses, and industry as a whole were believed to have been of high quality.

The surveys showed however, that company policy had not resulted in high job satisfaction among the workers or a good community reputation. In fact the harder the company tried and the more it got done, the more misunderstanding and disapproval seemed to develop. Something was lacking and General Electric officials felt that they must get local people to:

1. Understand and believe that a profitable industry is not good only for employees, share owners, customers, and suppliers, but most important to General Electric's community neighbors.

2. Know that the favorable benefits resulting from a profitable industry cannot continue to be enjoyed unless the citizens understand the business system which makes these benefits possible and understand their roles in keeping it profitable.

3. Appreciate that good paying jobs depend on the success of local businesses, including General Electric.

Based upon the findings of additional surveys conducted by Opinion Research Corporation the company devised a "formula" for rating plants. They maintain that the companies rated most favorably by the public followed this three point "formula" which is given below.

1. Live Right - treat employees fairly and humanely, pay good wages, provide employee benefits, and contribute fairly to charities.

2. Tell Employees About It - keep information channels open, tell employees company aims, objectives, and problems.

3. Tell the Community About the Company - inform community on company plans, aims, objectives, and problems. Show neighbors what company does for the community.[7]

According to General Electric, the companies rated lowest followed only the first part of the "formula" and those which were in the middle ratings followed only the first two parts.

Barlow and Payne have probably done the most extensive study of how to go about rating an industrial firm in a local community. They found that there are two main obstacles for researchers in a study involving the public opinion survey. First, respondents usually show a greater willingness to commend rather than to condemn a company,

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[7]Ibid., ERV-2A, 1955, pp. 9-13.

especially on matters which are neither of prime importance
nor of great interest to them. Secondly, the better known
something is the more likely people are to think they should
express an opinion about it, usually favorable. Therefore,
frequently large companies gain a high number of favorable
votes.[8] In order to deal with these obstacles Barlow and
Payne attempted to design a better technique for evaluating
a company's community relations. An explanation of the
technique is described in Chapter II.

The studies cited have made only a limited attempt
to determine what kinds of criteria are used to rate the
plants in a community. They have not probed whether the
ranking of plants is associated with characteristics of the
respondents. This study will attempt to determine what kinds
of criteria are used to rate plants and what relationship
exists between the social characteristics of the respondents
and their ranking of local plants.

Research Problems

The problem of this study is to determine where
and on what basis the male wage-earners of a middle-sized
industrial city rate the plants in their community and
whether different types of workers rate the plants differ-
ently. Some of the questions to be answered are as follows:

[8]Walter G. Barlow and Stanley L. Payne, "A Tool
for Evaluating Company Community Relations," _Public Opinion
Quarterly_, Fall, 1949, p. 405.

1. What are the characteristics of plants which are rated best and worst in the community?

2. Why do the workers evaluate plants differently?

3. How do the workers rate their own plants as places to work?

4. Are the factors used to rate a plant the same as those used to rate jobs?

5. Is there a relationship between the social backgrounds and experiences of the workers and their plant rankings?

The Terre Haute study selected a sample from the general public and inquired about the rating of local firms as "good neighbors," as "good citizens," and as places to work. The present research chose a sample of the male wage-earners in the city and is focused only upon the firms as places to work. Five hypotheses were developed which will be further developed in the subsequent chapters.

Hypotheses

1. The rating of the plants by the workers is associated with the size, type of industry, and type of ownership of the plants.

  a. Locally owned plants will be rated higher than absentee owned plants.

  b. Workers in small plants will rate their own plant higher than workers in large plants.

  c. Non-manufacturing industries will be rated higher than manufacturing industries.

2. The largest plants in terms of number of em-

ployees will be named most frequently as the best places to work.

3.   The workers rate the plants in the community as places to work with the same criteria they use to rate their jobs.

4.   Workers who have high job satisfaction tend to evaluate plants where they work more highly than workers with low job satisfaction.

5.   Plants will be rated differently by workers with different social backgrounds.

Methodology

Because the data used for this research has been obtained from a larger study, the research site and sample selection for that study are relevant for this research.

Research Site

The data for this study were gathered in 1950-1951. According to the 1950 census, Lansing, Michigan had a population of 92,129. This represented a seventeen percent increase over the 1940 figures and contrasts with the almost stable population of the previous decade. Annexation accounted for approximately 8000 of the increase. For a community with such a high concentration of automotive and metal working industries, the growth during the war years was relatively low and reflected a moderate degree of stability.

The population of Lansing is highly homogeneous, comprised essentially of the descendants of early Anglo-Saxon, New England migrants and nineteenth century German migrants. Most of the movement into the area over the last few decades has been from rural Michigan. The only large group of in-migrants to Lansing from areas other than rural Michigan

has been workers from the rural South.

Most of the local industry was founded at the turn of the century although the names of many establishments have changed. General Motors Corporation through its Oldsmobile plant, its Oldsmobile forge, and its Fisher Body Plant, employs a large proportion of the industrial labor force of Lansing and its environs.[9] Other large and important plants are Motor Wheel which manufactures motor vehicle equipment, Reo Motors which manufactures mainly trucks and John Bean which manufactures agricultural equipment.

All of the manufacturing establishments which employ more than 100 workers are in the metal working industry, most of which are home owned. Of the 113 manufacturing enterprises listed by the Lansing Chamber of Commerce for April 1951, 54 were in metal working, 14 in foods and kindred products, 10 in chemical and allied, 6 in printing, 7 in stone, clay and glass, 4 in furniture, store fixtures and miscellaneous, 3 in "other" manufacturing, 2 in utilities and 1 in textiles.[10]

Sample Design and Composition

The data for this study were taken from a larger study of the manual labor force in the city. The original sample was limited to male manual workers in the Lansing

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[9] Since the original study, a new multi-million dollar jet plant has been put into operation by the General Motors Corporation.

[10] Sigmund Nosow, "Labor Distribution and the Normative System," Social Forces, October 1954, p. 21.

labor market who were unskilled, semi-skilled, or skilled and the "first line" supervisors who were in charge of manual workers. A five percent sample of male wage-earners consisted of approximately 750 workers. A sample of 300 was decided upon, 200 to be taken from the fringe areas of Lansing, the remainder being residents of the city. Having drawn the "city" group from the Polk's Directory of Lansing, it was found that the 600 contained a representative sample of fringe residents. The schedules finally analyzed consisted of 583 interviews taken during the period from November, 1950 to June, 1951.[11] Each respondent was personally interviewed using a prepared schedule designed to obtain along with other data that which was needed for the original problem. This was to study the relevance of migration to location in the job market during an era of a tight labor force. The study was carried out by J. Allan Beegle, William H. Form and Sigmund Nosow.

For purposes of this research only the 231 respondents who rated their own plants were used to test hypotheses one, four and five. Since the non-respondents were dropped out, chi-square tests were made to determine whether or not the respondents differed significantly in any way from the non-respondents.* If they do not then generalizations can be made about the total sample based on the findings for

[11] Ibid, pp. 28-29.

*The questions on plant evaluation were added after interviewing had begun.

the sub-sample. The chi-square tests with respect to size

of company, plant working, nature of industry, and union

membership were significant at the .001 level.[**] A con-

siderably larger proportion of the respondents were from the

plants with more than 500 employees. In the case of plant

at which the workers were presently employed a larger pro-

portion of the respondents were from Oldsmobile, Fisher Body,

Reo Motors, and Motor Wheel. There were about twenty percent

more respondents than non-respondents from the auto plants.

For all other types of industry there was a smaller propor-

tion of respondents than non-respondents. Approximately

ten percent more of the respondents were union members.

The chi-square tests for occupational level, type of owner-

ship, and income were significant at the .01 level. A

slightly larger proportion of the respondents were unskilled,

ten percent less of the respondents were semi-skilled, and

slightly more of the respondents were skilled. For type of

ownership of plant fifteen percent more respondents than

non-respondents worked in absentee owned plants. A smaller

proportion of the respondents were in the income group earn-

ing less than $1.50 per hour. Therefore, there is a signifi-

cant difference indicated between the respondents and the

non-respondents for these factors and findings for this

study with regard to them can be based only on the respondents.

[**]For complete results of the tests for differences
between respondents and non-respondents see appendix tables
XXVII through XXXVII.

The chi-square tests for marital status, birthplace, age, and education were not significant. Thus findings with regard to them are indicated as being true for the total sample. These results do not necessarily mean that the results from the non-respondents would be different if they had responded. The chi-square tests merely indicate that the two groups can not be said to be the same.

Statistical Techniques

The chi-square tests of association between variables was used to determine whether or not rating of a plant is associated with the variables named. The .05 level of significance was used as evidence to reject the null hypothesis. However, higher levels of significance are noted.

The formula used for computation of the chi-square values was the basic formula:[12]

$$x^2 = \sum_{j=1}^{1} \sum_{i=1}^{k} \frac{(f_{ij} - F_{ij})^2}{F_{ij}}$$

f_{ij} = observed frequency.

F_{ij} = expected frequency.

By computing the chi-square value for each row in a table it can be determined which row contributes the most to the total significant chi-square. The same procedure holds true for the columns in a table. The total of the

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[12]Helen M. Walker and Joseph Lev, Statistical Inference, Henry Holt and Co., New York, 1953, p. 97.

chi-squares for the rows is equal to the total of the chi-squares for the columns which is the chi-square value for the whole table.

CHAPTER II

RANKING OF PLANTS

Introduction

How does the reputation of a plant get established in a community? What actually determines whether a plant will be rated as a good or a bad place to work? An attempt will be made to give at least a partial answer to these questions in this chapter. The hypotheses to be discussed are as follows:

1. The rating of the plants by the workers is associated with the size, type of industry, and type of ownership of the plants.

    a. Locally owned plants will be rated higher than absentee owned plants.

    b. Workers in small plants will rate their own plant higher than workers in large plants.

    c. Non-manufacturing industries will be rated higher than manufacturing industries.

2. The largest plants in terms of number of employees will be named most frequently as the best places to work.

3. The workers rate the plants in their community as places to work with the same criteria they use to rate their jobs.

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Studies have established that the reputation of
a plant is determined for the most part by its employees.
Welcker found that the principal factor influencing community
relations is employee relations. The standing of a plant
in a community was found to be largely a reflection of what
its own employees think about their employer. This applied
equally to large cities and small towns.[1] Barlow and Payne
obtained similar findings in their research.[2] They base
their findings on the concentric ring theory of public rela-
tions which maintains that a company's reputation starts
among its employees and spreads outward. Workers partici-
pating in community activities talk about their jobs and
employers. Their opinions gradually spread over the commun-
ity and a plant gets a peculiar reputation as a place to
work. In addition to hearing others talk about the local
plants many workers change employers from time to time and
in this way obtain first hand information about establish-
ments.

There are many other factors that affect a firm's
reputation. It must be emphasized that firms may have unique
factors that make comparisons difficult. For example, a
firm whose employees come in constant contact with the public,

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[1]John W. Welcker, "The Community Relations Problems
of Industrial Companies," <u>Harvard Business Review</u>, November,
1949.

[2]Walter G. Barlow and Stanley L. Payne, "A Tool
for Evaluating Company Community Relations," <u>Public Opinion
Quarterly</u>, Fall, 1949.

such as a department store, have more opportunity to influence public opinion than a firm whose employees have little or no public contacts.

It should also be noted that once a plant has established a good or bad reputation in the community it does not get changed easily. This holds especially for a firm with a bad reputation. It may retain a low rank even after the reasons for the bad reputation have been corrected. This situation may be minimized if the firm has a good public relations and publicity department.

Some of the objective characteristics which can be used to compare plants are size of capital investment, number of employees, and type of ownership. A large firm with an impressive building and which engages in nationwide business and advertising will tend to have a better reputation because it is better known. Whether a firm is locally owned or part of a huge corporation may also effect its local reputation.

Pellegrin and Coates conducted a study in a large Southern city in 1955 which focused upon the influence of absentee owned corporations and their executives in the civic affairs of the community.[3] These researchers pointed out that recent changes in the South and in the nation have promoted the corporate concern with public sentiment and

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[3] Roland J. Pellegrin and Charles H. Coates, "Corporations and Community Power Structure," *American Journal of Sociology*, March, 1956, p. 413.

the desire to develop and maintain a favorable public image as a weapon for use in labor-management controversy. Corporations are contributing money and time to community projects as a means of creating and reinforcing a favorable public image of the corporation. Not only does the corporation dictate the terms, but also it decides what social values are to be implemented by its choice of projects and the policies to be followed by corporation executives in civic affairs. The corporation executives were found to belong to less organizations than men from locally owned plants. However, the corporation executives belonged in 60 percent of the cases to both of the two most powerful organizations in the community.[4] This enabled them to have more influence in the community and tended to put the corporations they represented in a favorable light.

Another element affecting plant reputation is the fact that different types of industries have different public appeal or prestige. A quiet, clean plant will rate higher than one which is noisy, deposits a lot of dirt, and emits unpleasant odors. Different types of industries determine the kind of people they attract to the community. Some industries require workers who have college educations, while others call for workers with little or no education. Generally industries which use more highly educated labor forces also pay higher wages. As a result, a community whose

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[4]Ibid.

industries call for the more highly educated will differ
from a community whose industries require the less educated.

Paul Gillen has attempted to develop a yardstick
for measuring cities. He points out that the occupational
profile of a city is a basic measure of its overall worth.
Occupations of people reflect not only their more obvious
characteristics such as income, health, education, and
housing, but also their attitudes, hopes, fears, ambitions,
and frustrations. He found that occupations have much to do
with education in a city, and that attitudes regarding educa-
tion can be changed and additional financial support can be
obtained by changing the occupational distribution of a
community.[5] Under these circumstances a plant which attracts
highly educated people and pays them well will be more like-
ly to have a good reputation in the community than a plant
which attracts less educated and lower paid workers and
their families. All of these factors must be taken into
consideration as things which will influence plant reputation.

Ranking of Plants

Respondents were asked the question, "What com-
panies do you consider the best places to work in Lansing?"
Table II shows how the firms were rated by the workers.
Since some workers named more than one plant there were
411 responses from the 271 respondents. Oldsmobile was

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[5]Paul B. Gillen, The Distribution of Occupations
as a City Yardstick, King's Crown Press, Columbia University,
New York, 1951, pp. 107-111.

TABLE II

WORKER EVALUATION OF BEST PLANTS IN WHICH TO WORK

Plants	Respondents	Responses
	Percentages	
Oldsmobile	59.0	38.9
Motor Wheel	19.9	13.1
Reo Motors	15.1	10.0
Fisher Body	12.5	8.3
John Bean	4.8	3.2
Government; Federal, State, Local	3.3	2.2
Utilities	2.2	1.5
Other Plants not Specified	26.9	17.8
Small Companies	2.2	1.5
No Difference among Plants	4.1	2.7
No Opinion	1.5	1.0
Total	--	100.0
Number of Respondents	271	--
Number of Responses	--	411
Average Number of Responses	--	1.5

rated among the best by three-fifths of the workers. Next
was Motor Wheel closely followed by Reo and Fisher Body.
These latter three were named among the best less than one-
third as many times as Oldsmobile. All of these are auto-
mobile manufacturing plants.

Next the respondents were asked, "What companies
do you consider the worst places to work in Lansing?"
There were 212 responses to the question from 182 respondents.
Table III reveals that Fisher Body was named by almost one-
quarter of the workers. The forges and foundries were named
most often as the worst places to work in Lansing. A little
more than one-fourth of the men named them among the worst
places to work. Reo Motors received the next largest number
of unfavorable responses, followed by Motor Wheel and Olds-
mobile.

Note that the four plants which were named among
the best the largest number of times were also named among
the worst the largest number of times after the forges and
foundries. If the latter are excluded we see that the
plant named among the best the largest number of times, is
named the smallest number of times among the worst. For the
four plants named most frequently we see that their ranking
as best is the reverse of their ranking as worst. See Table
IV. As shown in Tables II and III, the remainder of the
firms in the city were named as one of the best or worst a
very small number of times or the firm was not even identi-
fied. The reasons for ranking the firms the way they did will
be discussed later in connection with hypothesis number three.

TABLE III

WORKER EVALUATION OF WORST PLANTS IN WHICH TO WORK

Plants	Respondents	Responses
	Percentages	
Forges and Foundries	26.4	22.6
Fisher Body	24.2	20.8
Reo Motors	16.5	14.2
Motor Wheel	6.6	5.7
Oldsmobile	5.5	4.7
John Bean	0.5	0.5
Other Plants not Specified	24.7	21.2
Any Factory	3.3	2.8
Not Much Difference among Plants	2.2	1.9
No Opinion	6.6	5.7
Total	--	100.0
Number of Respondents	178	--
Number of Responses	--	212
Average Number of Responses	--	1.1

TABLE IV

COMPARISON OF PLANTS EVALUATED AMONG THE BEST
MOST FREQUENTLY WITH PLANTS EVALUATED
AMONG THE WORST MOST FREQUENTLY

Plant	One of Best	One of Worst
	Percentages	
Oldsmobile	59.0	5.5
Motor Wheel	19.9	6.6
Reo Motors	15.1	16.5
Fisher Body	12.5	24.2
Number of Respondents	271	178

Plant Characteristics

In an attempt to provide more background information about the plants included in this research an analysis was made of their type of ownership, size, and industrial type. The first hypothesis of this research is that the rating of the plants by the workers is associated with the type of ownership, size, and industrial type of the plants.

a. Locally owned plants will be rated higher than absentee owned plants.

b. Workers in small plants will rate their own plant higher than workers in large plants.

c. Non-manufacturing industries will be rated higher than manufacturing industries.

First the respondents were divided into three groups:

1. Those who listed places where they work as among the best.

2. Those whose own plant was not listed as best or worst. Presumably their plants were in the medium range.

3. Those who listed places where they work as among the worst.

Then the workers were distributed for each characteristic based on the way in which they rated their plant.

Hypothesis Ia: Type of Ownership

It is expected that workers in a locally owned plant will tend to identify it more with the community and

rate it higher than an absentee-owned plant. The data in
Table V do not uphold the expectation that locally-owned
plants would be rated higher than the absentee-owned plants.
Seven-tenths of the absentee-owned plants were rated among
the best compared to only a little more than half of the
locally-owned. That these differences are not due to chance
is revealed by the probability of the chi-square which
is significant at the .05 level. One-tenth more of the men
from locally-owned plants rated their plant medium than did
men from absentee-owned plants. Twice as many from the
locally-owned plants rated their plant low as did those from
absentee-owned plants. However, since there was such a small
percentage who ranked their own plant low, most of the
analysis concerns differences between middle and high.

Hypothesis Ib: Size

Since a small plant permits a greater amount of
personal contacts with other workers and with supervisors,
it is expected that the workers will identify with these
plants to a greater degree than will workers in large plants.
The former will therefore rate their own plant higher than
will workers in large plants. Table VI shows data on how
the workers rated their own plants on the basis of number
of employees. The data do not support the hypothesized
expectation. Thus seven-tenths of those from plants employ-
ing over five-hundred men rated their plant high as compared
with only one-third from the plants with less than one

TABLE V

WORKER EVALUATION OF PLANTS BY THEIR TYPE OF OWNERSHIP

Plant Reputation	Type of Ownership		
	Local	Non-local	Total
	Percentages		
High	55.5	68.6	62.6
Medium	37.5	28.1	32.4
Low	7.0	3.3	5.0
Total	100.0	100.0	100.0
Number of Respondents	128	153	281

$$x^2 = 6.41 \quad d.f. = 2 \quad .02 < p < .05$$

TABLE VI

WORKER EVALUATION OF PLANTS BY SIZE OF WORK FORCE
IN THEIR PLANTS

Plant Reputation	Number of Employees			
	1-99	100-499	500&up	Total
	Percentages			
High	32.7	48.0	71.5	62.6
Medium	63.3	40.0	24.2	32.4
Low	4.1	12.0	4.3	5.0
Total	100.0	100.0	100.0	100.0
Number of Respondents	49	25	207	281

$$x^2 = 32.41 \quad d.f. = 4 \quad p. < .001$$

hundred employees. The chi-square test of association was found to be significant to the .001 level.

It should be noted here that this is the rating of workers own plants distributed by size of plant based on number of employees. This is to be distinguished from the rating of all plants in the community by the workers as discussed below in connection with hypothesis number two.

Hypothesis Ic: Type of Industry

It is expected that the workers will rate the non-manufacturing plants higher than those involved in manufacturing because the non-manufacturing are smaller, cleaner, and have greater intimacy among workers. Table VII shows how the workers rated their own plants which were classified by type of industry. These data do not uphold the expectation that non-manufacturing plants would be rated higher. Thus seven-tenths of those working in manufacturing plants rated their plants high compared to only one-third of workers in non-manufacturing plants. The probability of the chi-square which is at the .001 level indicates that these differences are not due to chance.

Further analysis of manufacturing plants shows that the forges and foundries are rated high most frequently. The auto plants are rated next highest followed by "other" manufacturing. Since we are dealing here with small numbers, however, these figures may not be as reliable as might be desired. It is of interest that although the forges and

TABLE VII

WORKER EVALUATION OF PLANTS BY TYPE OF INDUSTRY
IN WHICH THEY WERE EMPLOYED

Plant Reputation	Type of Industry					
	Manufacturing				Non-manufacturing	
	Drop Forge	Mfg. Metal and Other	Auto	Total Mfg.	Construction Services Trade Government	Total
	Percentages					
High	81.0	42.4	71.5	68.2	35.4	62.6
Medium	9.5	48.5	24.0	26.2	62.5	32.4
Low	9.5	9.1	4.5	5.6	2.1	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of Respondents	21	33	179	233	48	281

$$x^2 = 37.43 \qquad d.f. = 4 \qquad p. < .001$$

foundries were rated the largest number of times as the worst places to work by all of the workers, they were rated high the greatest percentage of times when rated by their own employees.

Hypothesis II

Something to be considered in connection with the rating of plants is that there may exist a reservoir of good will toward all plants in a community. If this is so then all plants are assumed to be worthy of a high ranking. If a plant is not worthy the workers will soon let the community know regardless of whether it is a small or a large plant. One of the common beliefs has been that big business (industry) is bad for a community. This is in line with the ideology of American businessmen that for the good of the community small business must be protected and supported. Mills and Ulmer conducted a study of small vs. big-business cities and tentatively concluded that big business tends to depress, while small business tends to raise the level of local "civic" welfare as measured by the Thorndike G score. Their more detailed findings were that small business cities had more "balanced" economies with larger proportions of independent entrepreneurs who showed greater concern for local civic affairs.[6]

In a more recent study dealing with this same sub-ject, Fowler found that small-business cities were found to

[6]Fowler, Irving A., "Local Industrial Structures, Economic Power, and Community Welfare," Social Problems, VI, Summer, 1958, p. 41.

have no higher levels of welfare than big-business cities;
small-business cities tended to have lower levels of welfare.
Fowler concluded that concentrations of economic power do
not have invariably adverse effects on community welfare.[7]
These findings seem to indicate that the big plants would
tend to be rated high in the community. The big plants
usually pay higher wages and provide more fringe benefits
and other extras for the community. This also would influence
the workers to rate the large plants high.

In previous discussion about how the reputation of
a plant is established in a community reference was made to
the importance of size of the plant in terms of number of
employees. Barlow and Payne have designed a tool which
among other things deals with the factor of number of em-
ployees in evaluating a company's community relations. They
asked, "What interpretation is to be placed on an eighty
percent favorable answer about a large company as a place to
work?" Should this showing be applauded; is it poor; does
it mean anything at all? They decided that a norm was needed
which would tell them that among similar companies, similarly
situated, the average favorable answer to a given question
amounts to such and such a percent. To meet difficulties
they felt it would be necessary to develop norms within each
particular survey. Also by having the same respondents
testify about all the companies one of the elements of

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[7]Ibid., p. 49.

sampling variation is eliminated.

Because all companies may get high scores, simple comparisons between the scores made by various firms does not always provide a basis for interpretation. Surveys have shown that due to some kind of an "aura" effect one company is rated ahead of all other companies over and over again. In searching for reasons behind this "aura" effect, The Public Opinion Index for Industry conducted a study in six different communities, in each of which eight companies were investigated. This investigation showed that the relative number of employees provides a key to the "aura" effect. Generally speaking the larger the number of employees the more likely the company is to be rated tops by a high proportion of the community. The relationship is practically a one-to-one ratio. That is, if company X has 62 percent of the employees of all companies on the list then 62 percent of the choices expressed by a cross section of all residents of the community should name company X. For the 48 companies, the straight line correlation between number of employees and the percentages of public choices of the company they "knew most about" was 0.907. Barlow found that, all other things being equal, the opportunity a company has to impress itself on a community is directly related to the number of employees. This is based on the concentric ring theory of public relations which maintains that a company's reputation starts among its employees and spreads outward.[8] This process

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[8]Barlow and Payne, op. cit., p. 408.

has been described above in the discussion of how a plant reputation gets established.

In his study of Terre Haute, Roper found that the two largest companies were rated the highest[9] and in his study of Illini City, Wray found that a large grain processing mill was the best known company, and the one with the most favorable reputation. Wray also found that positive attitudes tended to be held toward the best known companies.[10] The substantial number of respondents who stated negative opinions about local plants in the Lansing study varies from the findings of other studies. The respondents did not hesitate to name the worst places to work and they gave reasons why they were poor. Why some workers rated a plant as among the best and others rated the same plant among the worst will be analyzed in Chapter V. The way in which negative attitudes are formed and disseminated in the community is no doubt the same as that described for positive attitudes.

Based on the findings of the studies cited, the second hypothesis of this research is that the largest plants in terms of number of employees will be named most frequently as the best places to work.

Since Oldsmobile employs the largest number of people in Lansing it is expected that it will be the plant most frequently named as the best place to work. As revealed

[9]Roper, op. cit., p. 38.

[10]Wray, op. cit., p. 121.

Oldsmobile was named over one-half of the time as one of the
best plants. This is almost three times as often as Motor
Wheel which was second in the number of times mentioned.
The next two plants were Reo Motors and Fisher Body in that
order. Using the technique, known as "par for size correc-
tion," developed by Barlow and Payne an attempt was made to
determine the significance of the answers obtained to the
question, "What companies are the best places to work in
Lansing?" The plants compared are Oldsmobile, Motor Wheel,
Reo, and Fisher Body which are the four largest plants in
Lansing. To use this technique all the firms must be similar
in nature. The four plants named manufacture motor vehicles
and automobile equipment. It should be noted that "par"
does not standardize for the influence of a nationwide firm
and for a large amount of advertising, but only for present
size of the firm. Any recent, significant changes in a
plant will effect the accuracy of "par for size" correc-
tions.[11] As far as this writer knows no such significant
changes took place in the recent operation of the above
plants at the time of the study.

Barlow and Payne found that "par for size" does not
work well on negative questions, such as "Which company pays
the lowest wages?"[12] They believe that some mixed kind of
predisposition operates on the replies to such questions.

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[11] Barlow and Payne, op. cit., p. 411.

[12] Ibid.

Evidence indicated that instead of answering in terms of the best known company, some respondents tend to exclude the best known company from consideration when giving negative evaluations. Instead of thinking, "It must be the company I know best," as most respondents do on positive issues and as some do even on negative issues, these respondents think, "Well, it can't be the company I know best, that's sure." That this is true also for this research is indicated by the fact that of the large plants the largest is rated as best the greatest number of times and as worst the least. Therefore the "par for size" technique was used only for the ranking of plants as best.

First the number of people employed by each firm at the time of the study was determined.[13] Then the percentage of the total number of employees employed by each firm was determined. Next, to make the "par for size correction" the proportion of expressed choices as one of the best places to work for each firm is compared with the proportion of the total number of employees which each firm employs as shown in Table VIII. Only the four largest plants were used out of all the plants named in this study. Therefore only the respondents who named one or more of these four plants were included in the comparison of proportion of plant work force with proportion of expressed choices. The proportion of workers included in the sample was such

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[13]See footnote to Table VIII.

TABLE VIII

RANKING OF LARGEST PLANTS BASED ON NUMBER
OF EMPLOYEES COMPARED WITH RANKING BASED
ON EXPRESSED CHOICES OF WORKERS

Plant	No. of Employees*	Proportion of Total Employees	Expressed Choices
		Percentages	
Oldsmobile		44.0	79.5
Fisher Body		25.5	17.0
Motor Wheel		17.7	27.0
Reo Motors		11.4	20.5
Miscellaneous Small Plants Engaged in Manufacture of Motor Vehicle Equipment		1.4	--
Total		100.0	--
Total Expressed Choices			288
Total Respondents			200

*Federal regulations prohibit the disclosure of
the labor force for an individual plant. Therefore, the
individual figures and the figure for total number employed
in the above plants cannot be given. The percentages given
to show the ranking of the plants were obtained without the
labor force figures from the Michigan Employment Security
Commission. The percentages were computed by the labor
market analyst for the Lansing labor force area and are
based on figures showing the estimated number of persons
employed by motor vehicle and equipment manufacturing firms
for November, 1950, the month that interviewing began. Data
for this month were selected because it was the peak month
for employment during the interviewing period, November, 1950,
to June, 1951.

that any one plant was not over represented. Less than half

of those who chose Oldsmobile worked for Oldsmobile. About

one-third of those who chose Fisher Body and Motor Wheel

and one-sixth of those who chose Reo Motors worked for these

plants.

Since Oldsmobile employed 44 percent of the total

number of employees working in the motor vehicle plants the

expected number of expressed choices for Oldsmobile should

be at least 44 percent. Table VIII reveals that Oldsmobile

was actually chosen 80 percent of the time as one of the

best places to work in Lansing. Since a one-to-one ratio

is all that is expected this additional 36 percent indicates

that Oldsmobile must have some reason for being rated higher

than par and highest in the community. This result also lends

support to the hypothesis that the largest plant in terms

of number of employees will be chosen most frequently as

one of the best places to work.

Reo Motors while employing only one-tenth of the

total employees was chosen by one-fifth of the men as among

the best places to work. Motor Wheel employed 13 percent of

the employees and was chosen 27 percent of the time. These

additional choices above the expected one-to-one ratio

indicates that these plants also have a good standing in

the community. The concentric ring theory and the results

of the 48 company study suggest that Fisher Body, with 26

percent of the total number of employees, should have been

selected at least by that proportion to maintain a par position.

Yet Fisher Body was chosen only 17 percent of the time, an under representation of almost 10 percent.

Table III indicates that Fisher Body was given as one of the worst places to work more often than as one of the best. An attempt was made to find out why Fisher Body was rated so low. First of all it was determined how many of the 44 workers who rated Fisher Body as among the worst were Fisher employees. Only 6 worked for Fisher Body, so the low rating was given by workers from other plants, 17 of them being from Oldsmobile. Of the 44, 38 did not name any other plant as among the worst places to work. Only 3 of these 38 worked at Fisher. Next the reasons given by the 44 for rating Fisher Body as worst were examined. Following is a breakdown of the reasons given: hard physical work and dirty work-18; poor working conditions-5; poor wages-4; unsteady work-4; poor human relations-3; miscellaneous reasons-9; and no reason-1. Based on these data we can say that the reason for Fisher Body being rated low is apparently because the type of work done there is dirty and requires hard physical labor and because working conditions and human relations are such that the workers do not like Fisher Body as a place to work.

Hypothesis III

The third hypothesis is that the workers rate the plants in their community as places to work with the same criteria that they use to rate their jobs. In order to get

the information to test this hypothesis the workers were asked open ended questions how they liked their jobs and why they liked or disliked them. Specifically they were asked, "What sorts of things do you like about your job?" and "What sorts of things do you dislike about your job?"

These questions were followed by questions about the ranking of local plants as discussed above. Respondents were asked for the reasons why they named plants as best and as worst. Based on the data obtained from the answers to these questions all of the codes which are used here were empirically derived prior to problems of this research. The fact that these categories are not strictly comparable points to some differences in job and plant ratings. Ideally pre-determined categories are needed and therefore this lack of comparability is a weakness of this research.

The question arises whether the workers actually differentiate between their plant and their job. It has been suggested that they think in terms of their job when answering both the questions about their job and the questions about the plants. If this were the case then it would follow that the reasons given for liking or disliking the plants and their jobs would naturally be the same. That this is not necessarily the case seems to be supported by the answers given by the respondents.

Data in Table IX reveal that two-fifths of the men named job interest as the reason for liking their jobs.

TABLE IX

CRITERIA USED BY WORKERS TO RATE PLANTS AS BEST AND JOBS AS SATISFACTORY

Job Satisfactions	Percentages
Job Interest	39.5
Good Wages	36.5
Good Working Conditions	23.3
Relations with Fellow Workers	18.1
Steadiness of Work	17.0
Independence and Control	16.7
Fairness of Treatment	12.1
Other Reasons	7.3
No Job Satisfactions	1.9
Total Responses	629
Total Respondents	365

Why Plants are Best Places to Work	Percentages
No Opinion	30.4
Good Wages	26.0
Steady Employment	23.3
Human Relations	17.5
Good Working Conditions	14.8
Other Unspecified Reasons	18.9
No Difference among Plants	2.5
Total Responses	376
Total Respondents	365

This was closely followed by good wages as a criterion. A little over one-fifth of the men gave good working conditions as their reason. This was followed by relations with fellow workers, steadiness of work, and independence and control in that order. Less than two percent of the men said they had no job satisfactions.

When asked why plants were the best places to work one-third of the men had no opinion on the subject. One-fourth of the men gave good wages as a reason for plants being rated high. This was closely followed by steady employment, human relations, and good working conditions, in that order. Only about two percent said that there was no difference in plants.

Since the same respondents were used for job satisfaction criteria and plant reputation criteria a comparison can be made between the reasons given by the workers for liking their jobs and rating plants high. Good wages ranks a close second as a reason for being satisfied with jobs and among those who stated an opinion good wages ranked first as a reason for rating a plant best. This tends to discredit the claim of some people that money is not one of the most important things for the worker on the job. Job interest was given more often than good wages for being satisfied with jobs, but the more interesting jobs probably pay more than others. This criterion was not used to rate plants.

Steady employment was the next most important
reason for rating plants high and almost the next most
important for job satisfaction. That this rates almost as
high as wages indicates that plants should attempt to pro-
vide steady employment if they want satisfied workers and a
high rating for their plant in the community. Since a large
proportion of the men work in the automotive plants where
they are frequently layed off for model changes and for
other reasons, steady employment could be expected to be
of considerable importance for the men in this sample.
Therefore this factor may be somewhat over emphasized in
this study compared with what it would be for a more diver-
sified sample of workers.

The remaining criteria used for evaluating plants
and jobs can be classified in the general area of working
conditions. This includes human relations, fair treatment,
easy or hard work, and independence and control. Based
upon the data obtained from these respondents it seems
apparent that workers use some of the same criteria to
rate plants and jobs. However, there are some criteria
which are used only for rating plants and others only for
rating jobs. Thus the hypothesis is only partially support-
ed by these data.

Next we shall examine the data in Table X which
gives the criteria used to rate jobs dissatisfactory and
plants as worst. Probably the most important fact revealed
by these data is that two-fifths of the men had no job

TABLE X

CRITERIA USED BY WORKERS TO RATE PLANTS AS WORST
AND JOBS AS DISSATISFACTORY

Job Dissatisfactions	Percentages
No Dissatisfactions	38.1
Poor Working Conditions	35.9
Independence and Control	12.1
Job Interest	8.2
Poor Wages	5.5
Fairness of Treatment	3.3
Relations with Fellow Workers	1.9
Steadiness of Work	1.1
Other Reasons	4.2
Total Responses	402
Total Respondents	365

Why Plants Are Worst Places to Work	Percentages
No Opinion	56.2
Hard, Dirty Work	20.6
Poor Working Conditions	10.7
Poor Wages	8.0
Work Not Steady	5.2
Human Relations	4.4
Other Reasons	13.2
No Difference among Plants	1.1
Total Responses	435
Total Respondents	365

dissatisfactions. Almost as many of the men listed poor working conditions as the reason for job dissatisfaction. Other reasons given were lack of independence and control, lack of job interest, poor wages, unfair treatment, poor relations with fellow workers, and unsteady work.

When asked why plants were rated as the worst places to work more than one-half of the men had no opinion. Hard dirty work was given most frequently as the reason for ranking a plant among the worst. This might be explained by the fact that these jobs are usually of a low status level. This probably explains why plants with this kind of work would be rated low. An example of this would be the low ranking of the forges and foundries in this study. However, none of the men said that they disliked their job because they had to work too hard. Poor working conditions were next in importance for ranking plants low. Other reasons given were poor wages, unsteady work, and poor human relations. These data indicate that the workers who have job dissatisfactions and rate plants low use essentially the same criteria for rating plants and jobs. Thus the hypothesis is also supported by these data.

Arranged in the order of their importance the main concerns of the men seem to be working conditions, wages, steadiness of employment, and human relations. The Terre Haute study found that steady employment, chance for advancement, level of wages, working conditions, and seniority

were ranked highest and in that order as the most impor-
tant reasons for choosing a company as a place to work.[14]
A comparison of the factors deemed most important by the
workers in this research with the Terre Haute and General
Electric and with other studies indicates that the findings
of this study are similar to their findings.

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[14]Roper, op. cit., March, 1950, p. 40.

CHAPTER III

THE WORKERS RANKING OF HIS OWN PLANT

Much has been said about how a plant is rated in
the community by different groups and by the community as a
whole. The studies cited have been concerned primarily
with the ranking of all community plants by a sample drawn
from all of the people. This research has used a sample
of male workers only and the focus of this chapter is going
to be upon how the individual ranks his own plant. First
we will attempt to determine what kind of a relationship
exists, if any, between degree of job satisfaction and the
way in which a worker rates his own plant. Secondly we
shall examine the relationship between social background
characteristics and the way in which a worker rates his
own plant.

Hypothesis IV
The Relationship of Plant Reputation to Job Satisfaction

The fourth hypothesis of this study is that workers
who have high job satisfaction tend to evaluate plants where
they work more highly than workers with low job satisfaction.
In other words plant reputation is believed to be partially
a function of job satisfaction. To obtain the information
for testing this hypothesis the workers were asked the
question, "How do you like your job?" Their answers were
grouped into three categories, high, medium, and low.

Next it was determined where the respondent rated his own plant. The respondents who gave their own plants among the best plants in which to work were classified in the high plant reputation group. Those who did not give their own plant among the best or worst were classified in the medium group. Those who gave their own plant among the worst places in which to work were classified in the low plant reputation group.

In order to test the hypothesis the job satisfaction of the respondents was distributed on the basis of the reputation they assigned to their own plant. The test for significant association between plant reputation and job satisfaction was made by use of the chi-square test described previously. This analysis of the data in Table XI indicated as expected that there is an association between plant reputation and job satisfaction. The chi-square was found to be significant to the .001 level. Data in Table XI upholds the expectation that workers with high job satisfaction will rate their own plant higher than workers with low job satisfaction. An analysis of the data shows that almost two-thirds of the workers rated their own plant high, one-third rated their own plant medium, and only 5 percent rated their own plant low. Of those who had high job satisfaction three-fourths rated their own plant high, one-fifth medium, and 4 percent low. Of those who had medium job satisfaction three-fifths rated their own plant high,

TABLE XI

WORKER EVALUATION OF THEIR OWN PLANT
BY THEIR DEGREE OF JOB SATISFACTION

Plant Reputation	Job Satisfaction			
	High	Medium	Low	Total
	Percentages			
High	75.6	61.7	26.1	62.6
Medium	20.5	36.7	39.1	32.4
Low	3.8	1.7	34.8	5.0
Total	100.0	100.0	100.0	100.0
Number of Respondents	78	180	23	281

$$x^2 = 56.9 \quad d.f. = 4 \quad p. < .001$$

one-third medium, and 2 percent low. Only one-fourth of the
workers with low job satisfaction rated their own plant high.
The remainder were about equally divided between medium
and low.

Further examination of the data on job satis-
faction for workers from the four largest plants reveals
that Motor Wheel and Reo Motors workers have about the
same distribution of job satisfaction ratings, with the
latter having a few more workers who are dissatisfied.
Oldsmobile's distribution ranks third in amount of job
satisfaction. Fisher Body is fourth, but this is accounted
for mainly by those who have medium job satisfaction rather
than low job satisfaction. See Appendix Table XVI.

These findings support the hypothesis that workers
with high job satisfaction will rate their own plant higher
than workers with low job satisfaction. Thus, we have seen
that there is an association between objective factors and
the rating workers give to plants, that workers use many of
the same factors to rate plants and jobs, and that plant
reputation is partially a function of job satisfaction.
But what about the workers themselves who have a wide
variety of individual characteristics? Is it possible that
the way in which a plant is rated is associated in any way
with this individuality? The final section of this research
attempted to determine whether a relationship does exist
between social characteristics of the workers and the way
in which they rate their own and other plants in the community.

<u>The Relationship Between The Image Held of The Firm And</u>

<u>The Social Characteristics of The Workers</u>

Eicher points out that empirical studies suggest that job satisfaction may be understood in the context of a person's social position as described by his position in the occupational, stratification, and community systems. They show that since men with the same jobs exhibited large ranges in their job satisfaction there must be other reasons responsible for job satisfaction than the factory environment and the job itself. Eicher's thesis was that the social milieu from which a person derives is of considerable importance for understanding job satisfaction.[1]

The final hypothesis of this research is addressed to the question whether or not similar importance be attached to the social milieu of a person in connection with his ranking of local plants as places to work. The hypothesis is that plants will be rated differently by workers with different social backgrounds. Because of the small size of the sample the men were divided into only two groups for each social characteristic and then were distributed based on whether they rated their own plant as high, medium, or low using the scale described previously. The results of the chi-square tests for each social characteristic are given in the following tables. The social

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[1]Joanne B. Eicher, "Job Satisfaction: Its Relationship to Occupational, Stratification, and Community Variables," M.A. Thesis, Michigan State University, 1956.

background characteristics which were used were divided into three categories. The first group to be discussed consists of demographic variables, the second of labor market variables, and the third of stratification variables.

It should be noted here that for these variables this study has used two types of tests of the hypotheses. For the tables in the text the sample includes men from all of the plants in the community who rated their own plants. The tables in the appendix include workers who were rating their own and other plants, but contain only the rankings of the four largest plants. The discussion of the data in the text is based upon chi-square tests for statistical significance while the discussion of the data in the appendix is based upon what the percentages in the tables seem to indicate.

Demographic Variables

Age

Eicher reports that there were several non-conclusive and conflicting results in the literature regarding the relationship of age to job satisfaction. She found some indication that older age was related to higher job satisfaction, but notes that her data were inadequate and that further research is needed to discover whether age and high job satisfaction are associated. Since in this study high job satisfaction was found to be directly related to high plant reputation it was expected that some indication

might be found that the older workers would rate their plants higher.

The expectation that the older men would rate their plants higher than the younger men was not upheld. The data in Table XII indicates that the same percentage of men rated their plants high, medium, and low in the age group from 18-34 as in the group 35 and over. The chi-square tests did not even begin to approach significance. Data for the four largest plants in Appendix Table XVII shows that Fisher Body which was rated fourth had the largest number of employees under 35. This would seem to support the above expectation. However, Oldsmobile with almost as great a percentage of employees under 35 was rated first. Motor Wheel and Reo Motors with the largest percentages of workers over 35 were rated higher than Fisher Body, but lower than Oldsmobile. Thus there must be some explanation for the way plants are ranked other than differences in age of the workers.

Birthplace

Because of the differences between locations where persons are born it might be expected that place of birth would be associated with the way in which persons rate their plants. Analysis of the data in Table XII pertaining to birthplace indicates that this expectation was not upheld. The chi-square test was not significant. Data on the four largest plants in Appendix Table XVIII shows that contrary

TABLE XII

WORKER EVALUATION OF THEIR OWN PLANT BY THEIR DEMOGRAPHIC CHARACTERISTICS

Plant Reputation	Age		
	18-34	35 & over	Total
	Percentages		
High	62.8	62.6	62.6
Medium	31.4	32.8	32.4
Low	5.8	4.6	5.0
Total	100.0	100.0	100.0
Number of Respondents	86	195	281
$x^2 = .21$	d.f. = 2	.90 p.<.95	

Plant Reputation	Birthplace		
	Michigan	Not Michigan	Total
	Percentages		
High	60.5	65.3	62.7
Medium	35.4	29.0	32.5
Low	4.1	5.7	4.8
Total	100.0	100.0	100.0
Number of Respondents	147	124	271
$x^2 = 1.4$	d.f. = 2	.30 p.<.50	

Plant Reputation	Marital Status		
	Single	(Any-) Married(time)	Total
	Percentages		
High	37.5	64.2	62.6
Medium	43.8	31.7	32.4
Low	18.8	4.2	5.0
Total	100.0	100.0	100.0
Number of Respondents	16	265	281
$x^2 = 8.9$	d.f. = 2	.01 p.<.02	

to expectations the locally born workers do not necessarily rate their plants higher and the non-locally born do not rate their plants lower. Motor Wheel has the smallest number of locally born, the largest number of foreign born, and almost as many Southern born as the other plants and yet it was rated high. Fisher Body was rated low. This apparently is not related to place of birth of the workers since almost the same percentage breakdown occurs for Fisher Body and Oldsmobile, the highest rated plant.

Marital Status

Since the married person has roles different from those of the single person it is expected that the ranking of plants by married workers will differ from that of the single workers. Examination of the data in Table XII indicates that the married workers can be expected to rate their plants higher than the single workers. Thus two-thirds of the married men rated their plant high while only two-fifths of the single workers rated their plant high. Only four percent of the married men rated their plant low while one-fifth of the single workers rated their plant low. That these differences are not due to chance is revealed by the probability of the chi-square which approaches significance at the .01 level.

The larger sample in Appendix Table XIX seems to indicate different results. Oldsmobile and Fisher Body had the same percentage of single men and yet the former was

rated first and the latter fourth. Motor Wheel with 98
percent of its men married was ranked second. However, it
was thought that sample size might be less important than
the likelihood that plants other than the "big four" have a
higher proportion of unmarried workers. Further examination
of the data showed that this was the case for this sample.
The data revealed that fifteen percent of the men from the
small plants were single compared with only six percent from
the "big four." Therefore the expectation that marital
status is associated with the way in which men rate their
plants was upheld.

Labor Market Variables
Number of Years in Lansing Labor Market

Since a worker who has been in the Lansing area
longer should know more about the community plants it is
expected that some association will be found between number
of years in the Lansing labor market and the way in which
the men rate their plants. This expectation was not upheld
by the data in Table XIII. The chi-square was not found to
be significant. Yet the data in Appendix Table XX would
seem to lend some support to the expectation that the number
of years in the labor market is associated with plant rating.
Fisher Body, rated fourth, has the highest percentage of
workers with less than one year in the labor market and
the lowest percentage with more than twenty years. Motor
Wheel employees had the highest number of years in the labor

TABLE XIII

WORKER EVALUATION OF THEIR OWN PLANT
BY LABOR MARKET VARIABLES

Plant Reputation	Number of Years in Lansing Labor Market		
	-3 years	+3 years	Total
	Percentages		
High	57.9	63.0	62.6
Medium	31.6	32.4	32.4
Low	10.5	4.6	5.0
Total	100.0	100.0	100.0
Number of Respondents	19	262	281

$x^2 = 1.33$ d.f. = 2 $.50 < p. < .70$

Plant Reputation	Time Employed by Present Concern		
	-3 years	+3 years	Total
	Percentages		
High	59.3	63.4	62.6
Medium	29.6	33.0	32.4
Low	11.1	3.5	5.0
Total	100.0	100.0	100.0
Number of Respondents	54	227	281

$x^2 = 5.32$ d.f. = 2 $.05 < p. < .10$

TABLE XIII
(continued)

Plant Reputation	Number of Companies Worked at 1940-1951		
	1or2 Co's.	3 or more Co's.	Total
	Percentages		
High	65.0	56.4	62.6
Medium	31.5	34.6	32.4
Low	3.5	9.0	5.0
Total	100.0	100.0	100.0
Number of Respondents	203	78	281

$x^2 = 4.3$ d.f. = 2 $.10 < p. < .20$

Plant Reputation	Union Membership		
	Non-Union	Union	Total
	Percentages		
High	55.4	66.1	62.6
Medium	42.4	27.5	32.4
Low	2.2	6.4	5.0
Total	100.0	100.0	100.0
Number of Respondents	92	189	281

$x^2 = 7.52$ d.f. = 2 $.02 < p. < .05$

market followed closely by Reo Motors. They rank second and
third in that order when rated by all of the workers. Here
again further research with larger samples is indicated as
necessary in order to come to definite conclusions.

Time Employed By Present Concern

If a man has been employed by a plant for a long
period it is expected that he would rate the plant higher
than a man who has been there only a short time. Analysis
of the data in Table XIII indicates that the amount of time
employed by the present employer is slightly associated with
the way a worker rates his plant. The probability of this
chi-square value occuring by chance is between .10 and .05.
Of those employed less than three years 59 percent rated
their plant high and only 63 percent of those with more
than three years rated their plant high. One-third of those
with more than three years rated their plant high. One-third
of those with less than three years rated their plant medium
and one-tenth rated it low while of those with more than
three years, one-third rated their plant medium and 4 percent
rated it low. The data in the Appendix Table XXI shows that
Fisher Body, rated fourth, has the largest percentage of
workers with less than six months seniority and the smallest
percentage with more than twenty years. Therefore indications
are that time employed by a plant is associated in some
manner with the way in which the plant will be rated by its
own workers.

Number of Companies Worked at 1940 to 1951

It was also expected that the number of companies
worked at would make a difference in the way in which a man
rated his own plant. Examination of the data in Table XIII
revealed that no significant differences were found between
the group who had worked for one or two companies and those
who had worked for three or more companies. Although the
chi-square was not significant there is some indication
that those who had worked in three or more plants tend to
rate their own plant a little lower than those who had work-
ed in only one or two plants. The data in Appendix Table
XXII also lends some support to this. Fisher Body with 32
percent of the workers having three or more jobs was rated
last of the four largest plants. Reo Motors was third with
29 percent, Motor Wheel second with 19 percent and Oldsmobile
first with 17 percent. That these findings are not unduly
influenced by the larger sample in the appendix is indicated
by the fact that no significant difference was found between
respondents and non-respondents for this variable.

Union Membership

Union affiliation was expected to have some assoc-
iation with the way the plants were rated. Data in Table
XIII upholds the expectation that union members will rate
their own plant higher than non-union members. Thus, two-
thirds of the union members rated their plant high while
slightly more than half of the non-union members rated their

plant high. However, two-fifths of the non-union members
rated their plant medium, compared with about one-quarter
of the union members. That these differences are not due to
chance is revealed by the probability of the chi-square
which approaches significance at the .02 level. That further
research is necessary, however, is indicated by the data in
Appendix Table XXIII. This larger sample for the four plants
shows that the lowest plant of the four, Fisher Body, is the
most highly organized. However, it does not have many more
members than the plants rated first and second. These
differences may be accounted for in the difference between
the respondents and non-respondents. The chi-square test
for this variable was significant at the .001 level.

Socio-Economic Variables

Education

Since Eicher found some indication, although not
statistically significant, that high job satisfaction was
associated with more education, it was expected that this
study might find an association between more education and
high plant reputation. Examination of the data in Table
XIV reveals that the expectation that the more highly
educated men will rate their own plants higher is not support-
ed. Thus, the workers with 0-8 years of school did not rate
their plants lower than those with high school and college.
The chi-square does not even begin to approach significance.
In each group, approximately two-thirds rated their plant

high, one-third medium, and one-twentieth low. The data

from Appendix Table XXIV on the four largest plants shows

that Fisher Body, rated fourth, has the largest percentage

of workers with less than 6 years of education. That this

is not too important is indicated by the fact that the first

rated plant, Oldsmobile, has almost as many workers with

less than 6 years. Oldsmobile has a few more men with

college, but not enough to enable us to establish anything

definite to relate amount of education and ranking of plant.

Income

In her study, Eicher found that income is directly

related to job satisfaction. Since this study found that

job satisfaction and plant reputation were also directly

related, it was thought that a similar relationship might

be found between income and plant reputation. It was

expected that the men with higher income would rate their

plants higher also, because we found that wages were a prime

factor in rating plants as good places to work. The data

in Table XIV do not support this expectation.

The data on the four largest plants in Appendix

Table XXV reveal that most of the workers get from $1.25

to $2.25 per hour. The highest ranked plant, Oldsmobile,

has the largest percentage of workers receiving from $1.25

to $1.75; Fisher, fourth ranked, has the second largest

percentage of men receiving from $1.75 to $2.25. Motor

Wheel, ranked second, pays the highest wages. Third ranked,

TABLE XIV

WORKER EVALUATION OF THEIR OWN PLANT ACCORDING
TO THEIR SOCIO-ECONOMIC CHARACTERISTICS

Plant Reputation	Education		
	0-8 years	H.S. or College	Total
	Percentages		
High	64.0	62.0	62.6
Medium	31.5	32.8	32.4
Low	4.5	5.2	5.0
Total	100.0	100.0	100.0
Number of Respondents	89	192	281

$x^2 = .13$ d.f. = 2 $.90 < p. < .95$

Plant Reputation	Income		
	\$1.00-1.74	\$1.75 and up	Total
	Percentages		
High	59.2	66.4	62.6
Medium	34.7	29.9	32.4
Low	6.1	3.7	5.0
Total	100.0	100.0	100.0
Number of Respondents	147	134	281

$x^2 = 1.9$ d.f. = 2 $.30 < p. < .50$

Plant Reputation	Occupational Level		
	Semi-and Unskilled	Skilled and Foreman	Total
	Percentages		
High	59.5	69.8	62.6
Medium	33.3	30.2	32.4
Low	7.2	0.0	5.0
Total	100.0	100.0	100.0
Number of Respondents	195	86	281

$x^2 = 7.36$ d.f. = 2 $.02 < p. < .05$

Reo Motors pays the lowest wages. These data indicate that even though wages are of such great importance in rating a plant as best or as worst they are not the sole determining factor. Since actual ranking based on wages paid does not correspond with the ranking of the plants by the workers some other basis must be found for ranking. A possible explanation is that the workers in the highest ranked plant are so satisfied that they believe they are getting the highest wages while the figures show that they actually are not. If this is true then management should take note and attempt to operate their plants in such a way that the workers are satisfied with over-all conditions in the plants. Apparently high wages, although important do not compensate for other things which are not satisfactory.

Occupational Level

Eicher reports that results of job satisfaction studies show a definite relationship between high prestige jobs and high job satisfaction. Thus it might be expected that the higher the occupational level the higher the plant reputation.

Analysis of the data in Table XIV indicates that the expectation that the higher skilled workers would rate their own plant higher is upheld. Thus, 70 percent of the skilled rated their own plant high while only 60 percent of the semi and unskilled rated their plant high. One-third of the semi and unskilled rated their plant medium and 30 percent of the skilled rated their plant medium. None of the

skilled rated their plant low while 7 percent of the semi and unskilled did. That these differences are not due to chance is revealed by the probability of the chi-square which approaches significance at the .02 level. The data in Appendix Table XXVI lends further support to the above expectation. Fisher Body, rated fourth, has the smallest percentage of skilled workers, 14 percent, and the largest percentage of unskilled workers, 16 percent. The first ranked plant has 22 percent skilled workers and 9 percent unskilled. The other two plants, Reo Motors and Motor Wheel, have an equal percentage of skilled workers and they are very close in ranking second and third. That Oldsmobile is ranked highest even though Reo Motors and Motor Wheel have ten percent more skilled workers can no doubt be explained by the fact that other factors which enter into the ranking of plant more than compensate for the differences in skill level of the work forces.

Although the results found in this research do not definitely establish it there are indications that workers who rate their plants low show a greater degree of association between social background characteristics and the way in which they rate their own plant. Since the sample used here is rather small only a direction can be indicated. In the chi-square tests for the ten character-istics above the men who rated their own plant low showed the greatest amount of difference from the total sample in eight out of the ten tests. Further research might show

that workers who rate plants low do have different character-
istics than those who rate plants high or medium.

Relationship Between Social Background Characteristics of
Workers and Their Ranking of Community Plants

In the previous section of this chapter an attempt
was made to show that there is an association between social
characteristics and the way in which workers rate their own
plants. It was found that such a relationship exists for
only a few of the characteristics tested. Since this was
the case the question arose as to whether or not there
would be significant difference in social characteristics
between workers when rating not only their own plant but
also all the other plants as among the best or among the
worst places to work. In other words, do those workers who
rated plants as among the worst differ in any significant
way from those workers who rated plants as among the best
places to work. In an attempt to determine this, chi-square
tests were made to establish whether the workers who rated
Oldsmobile as among the best differed in any significant way
from those who ranked Oldsmobile as among the worst.[2] The

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[2]Helen M. Walker and Joseph Lev, _Statistical Infer-
ence_, Henry Holt and Co., New York, 1953, p. 101. The formu-
la used for computation of chi-square was:

$$X^2 = \frac{(ad-bc)^2 N}{(a+b)(c+d)(a+c)(b+d)}$$

p. 106. In the cases where cell sizes were very
small the Yates correction was used. The formula for this is:

$$X^2 = \frac{\left(|ad-bc| - \frac{N}{2}\right)^2 N}{(a+b)(c+d)(a+c)(b+d)}$$

same was done for Fisher Body, Reo Motors, and Motor Wheel.
These tests were made for the same ten social background
characteristics that were used in the previous section.

The data in Table XV is a summary of the chi-square
values found for each of the ten characteristics and the
four largest plants. Only the four largest plants were
used for these tests because they account for all but a very
small percentage of the total responses. Since multiple
responses were given to the questions asked about which
plants are the best and which are the worst each plant
had to be taken individually. This was to avoid having the
results biased in the direction of those workers who gave
more than one response. No association was found to exist
between the social characteristics of the workers and the
way in which they rated the plants in their community. Only
two out of the forty chi-square values were significant at
the .05 level. These were the one for education of workers
who rated Fisher Body as best or as worst, and the one for
age of men who rated Motor Wheel as best or as worst. There
were a few others that approached significance and a larger
sample would be desirable to enable one to state whether
these characteristics are significantly related to the way
in which workers rate plants in their community.

TABLE XV

SUMMARY OF CHI-SQUARES FOR TESTS OF ASSOCIATION BETWEEN RATING
OF PLANTS AND SOCIAL CHARACTERISTICS OF WORKERS

Plant Rated Among Best or Worst	Social Characteristics of Workers									
	Age	Educ.	Occup. Level	Birth-place	Time Empl. Present Concern	Yrs. in Lansing Lab. Mkt.	No. Co's. 1940-1951	Union Member	Marital Status	Income
					Chi-squares					
						*			*	
Oldsmobile N = 169	.19	.14	.55	2.31	.65	.34	.09	.02	.07	2.30
Motor Wheel N = 66	3.00	.30	2.33	.67	1.11	1.07	.94	1.05	2.14	3.25
Fisher Body N = 78	.81	6.58	.02	2.05	2.09	.09	.00	.24	.61	.10
Reo Motors N = 72	4.30	.21	.25	1.98	2.26	.04	.03	.38	.07	.65

* Yates correction used in this column.

Chi-square value at the .05 level of significance is 3.841 with one degree of freedom.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The responses of 588 male, manual workers in the Lansing labor force were examined in an attempt to determine how they rated local plants as places to work. The data were first analyzed to determine which plants they rated as the best and as the worst places, and in what order they were ranked. Then the relationship was examined between the size, type of industry, and type of plant ownership, and plant rankings. This was followed by an attempt to determine what criteria workers used to rate plants and jobs and whether these criteria were similar or different. The final portion of this research attempted to find out if a relationship existed between job satisfaction and social characteristics of the workers and the way they ranked their own plant.

The largest plant, Oldsmobile, was found to be rated the highest followed by Motor Wheel, Reo Motors, and Fisher Body in that order. These are the four largest plants in the community. All of them manufacture motor vehicles or automobile equipment. The forges and foundries were ranked the lowest as places to work in the community followed by Fisher Body, Reo Motors, Motor Wheel, and Oldsmobile, in that order.

Hypotheses were developed in the areas discussed above and tested to determine their validity. The first

hypothesis was that the rating of the plants is a function of their size, industry, and type of ownership. It was expected that workers from locally-owned, small, non-manufacturing plants would rate their plants higher than workers from absentee-owned, large, manufacturing plants. Using chi-square tests for significance of association, it was found that the men from the locally-owned plants did not rate their plants higher than the men from absentee owned plants. In fact, the reverse was found to be true. The chi-square was significant at the .05 level. The explanation for this seems to be that the absentee-owned plants are larger and are able to provide more benefits and better working conditions for their workers, enough at least to more than offset the alleged advantages of greater intimacy in the smaller plants.

Also, the data did not support the hypothesized expectation that smaller plants would have a more favorable reputation as places to work. The chi-square was found to be significant at the .001 level. An explanation for this reversal might be, as explained above, that larger plants can do more for the workers and for the community. It was found that two-thirds of the men in manufacturing plants rated their plant high compared with only one-third from non-manufacturing plants. This reversal was statistically supported by a chi-square at the .001 level. Although manufacturing plants may have some disadvantages such as

noise and dirt, if they have good pay and satisfactory
working conditions they will still be rated high. A good
example of this is the high percentage of workers from the
forges and foundries who rated their plant high.

The second hypothesis was that the largest plants
in terms of number of employees would be named most frequent-
ly as the best places to work. This research found that
the four largest plants were named most frequently as the
best places to work and that the largest plant, Oldsmobile,
was named most often even after correcting for differences
in size. Not to be disregarded however, is the fact that
Fisher Body, the second largest plant, was named most fre-
quently as one of the worst places to work; even more often
than it was named among the best plants. From this we may
conclude that potentially the plant with the largest number
of employees has an advantage and will be ranked first in
the community, but only on the condition that its employees
have something good to say about the plant. If working condi-
tions, wages, or employment policies are such that the em-
ployees are not satisfied then they will disseminate
information in the community that will give the plant a
bad reputation. In other words in order to have a good
community reputation a plant must have grounds for being
well spoken of. It must see to it that its employees are
made aware of these favorable grounds and that the community
knows about the plant through its employees and by other
means of communication.

It was hypothesized that the workers rate the
plants in their community as places to work with the same
criteria that they use to rate their jobs. The data exam-
ined partially support this hypothesis. It was found that
workers do use essentially the same criteria in rating
plants and jobs. In fact, the most important criteria are
used in common. However, there are some additional criteria
which are used only in rating plants and others which are
used only in rating jobs. The main reasons given for liking
their jobs were job interest, good wages, independence and
control, steady work, and good human relations. Less than
two percent of the men indicated no job satisfactions. Good
wages, steady employment, good human relations and good
working conditions were the main reasons given for rating
a plant high. Two percent of the workers said there was
no difference in plants.

When asked for reasons for disliking jobs the
most significant finding was that two-fifths of the men
had no dissatisfactions. Almost as many of the men listed
poor working conditions as the reason for job dissatisfactions.
Hard physical work and dirty work were given by one-fifth
of the men as reasons for rating a plant low. This is prob-
ably partially due to the fact that persons in such jobs
are assigned a low status. It should be noted however that
generally the worker rates his own plant high. It is the
workers from the other plants who rate such a plant low.

Here again the forges and foundries can be cited as an example. They were named most frequently as the worst places to work by the men in the sample, but they were rated high by their own workers a greater percentage of times than any of the other plants. Also in the case of Fisher Body, of the 44 who named it as one of the worst places to work 38 were from other plants. The main concerns of the men in this sample then are working conditions, wages, steadiness of employment, and human relations. These findings are similar to those found in the Terre Haute and General Electric studies.

The third chapter dealt with the worker's ranking of his own plant as related to his job satisfaction and social background characteristics. The hypothesis that workers who have high job satisfaction tend to evaluate plants where they work more highly than workers with low job satisfaction was supported by the data. The chi-square was significant at the .001 level. Of those who had high job satisfaction three-fourths rated their own plant high and only 4 percent rated it low. Only one-fourth of those with low job satisfaction rated their own plant high.

Finally it was hypothesized that plants would be rated differently by workers with different social backgrounds. The background characteristics were divided into demographic variables; age, birthplace and marital status; labor market variables, number of years in Lansing labor market, time employed by present concern, number of

companies worked at 1940 to 1951, and union membership; and stratification variables, education, income, and occupational level. The data did not uphold the expectation that the older men would rate their plants higher nor that place of birth would be significantly related to the way in which a plant is ranked. The expectation that the married workers would rate their own plant higher than the single workers was upheld.

Examination of the data revealed that number of years in the Lansing labor market, time employed by present concern, and number of companies worked at was not associated with the way in which the workers rated their own plants. Although the chi-square was not significant there is some indication that those who had worked in three or more plants tend to rate their own plant a little lower. The expectation was upheld that union members would rate their plants higher than non-union members. The chi-square was significant at the .02 level. Union membership alone does not mean that a plant will be rated high. Fisher Body, is the most highly organized plant and yet it was rated fourth.

It was expected that the more highly educated men would rate their plants higher. The results of this study show that the workers with high school and college educations did not differ from those with an elementary education when rating their plants. The chi-square did not

begin to approach significance. The data also revealed
that the men with higher incomes did not rate their plants
higher than those with low incomes. In view of the fact
that wages were given as one of the most important criteria
for rating plants this finding is rather surprising. The
only explanation this writer can think of is that the
workers think they are getting as much or more in wages
as other workers in the community when actually they are
not. Since they do not know this they are satisfied and
give their plant a high rating. The data for this study
revealed that as expected the higher skilled workers rated
their plants higher. Thus, 70 percent of the skilled rated
their plants high compared to 60 percent of the semi and
unskilled. None of the skilled rated their plant low
while 7 percent of the semi and unskilled rated their plant
low. The chi-square approached significance at the .02
level.

Although the results found in this research do
not definitely establish it there are indications that
workers ratings vary with their social background character-
istics. Since a significant relationship was indicated for
only three out of the ten characteristics and the ranking of
the men's own plants, a question arose as to whether or not
a significant relationship would be found for the rating of
all the plants in the community. An analysis of the data
revealed that there were significant differences between

those who rated plants best and those who rated plants worst when distributed on the basis of age and education.

Limitations of the Study

There are some limitations on the results obtained in this study. First of all, it must be remembered that the data used were not collected specifically for this study. Therefore, some of the questions were not asked in such a way as to get at what may have been preferred for the purposes of this research. It should be remembered also that all categories were determined prior to thought about this study. However, it is believed that the data obtained were generally adequate for the uses of this research. The studies mentioned in this research that dealt with the ranking of industrial plants in the community differ from the present study. They used as their samples a wider representation of the total community. The sample for this study was made up of only male, manual workers in a specific community who were employed predominately in automotive manufacturing. Thus, the results cannot be applied to all communities, industries, and occupational, and class groups. For example, when male, manual workers are asked about the rating of plants in a community, they would answer more in terms of working conditions, wages paid, and other job-related criteria. Respondents from professional and managerial groups would probably answer the question more in terms of how much the firm participates in community affairs and how much the firm contributes to the community. Differences such as these between professionals

and manual workers are no doubt representative of the kind of differences which would be found between classes. A sample more representative of the entire community would allow for more valid conclusions concerning the ranking of the plants in the community as a whole. However, because of the importance of the differences that do exist among the various groups in our community, it may be wise for the researcher to choose samples from each of these groups and to find out how each ranks the plants in the community and what criteria they use.

Relevance for Further Study

As was mentioned in Chapter I, little systematic study of the reputations of industrial plants in local communities has been carried out. Some of the things which further research might be able to find out are how much do the workers in any given plant really know about other plants in the community? Do they know enough to enable them to rank the plants fairly as places to work, as good community "citizens," or for any other reason? Also, do the ratings come from the same universe of plants for each worker. As was noted throughout the chapter dealing with social background characteristics, further research is desirable in order to conclude more reliably whether social characteristics are associated with the way in which workers rate their plants. It would be especially desirable to study further whether plant ratings are related to the social background characteristics of workers. It is hoped that this research, limited

as it is, will call attention to the need for further study of plant reputation, both to enable management to determine what they must do to be accepted in the community and to enable all who are interested to find out what the workers feel is important for a plant to have a good reputation.

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TABLE XVI

JOB SATISFACTION OF EMPLOYEES OF SELECTED PLANTS

Plants	Job Satisfaction											
	Very Much		Pretty Good		Average		Not So Good		Not At All		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	42	24.6	60	35.1	46	26.9	18	10.5	5	2.9	171	100
Fisher Body	8	14.3	16	28.6	23	41.1	7	12.5	2	3.6	56	100
Reo Motors	12	34.3	11	31.4	8	22.9	4	11.4	--	--	35	100
Motor Wheel	17	35.4	16	33.3	12	25.0	2	4.2	1	2.1	48	100
Total	79	25.5	103	33.2	89	28.7	31	10.0	8	2.6	310	100

TABLE XVII

AGE DISTRIBUTION OF EMPLOYEES OF SELECTED PLANTS

Plants	Age																					
	19		20-24		25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-67		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	1	0.6	17	9.9	25	14.6	14	8.2	23	13.5	16	9.4	17	9.9	20	11.7	13	7.6	25	14.6	171	100
Fisher Body	1	1.8	6	14.3	5	8.9	11	19.0	8	14.3	4	7.1	3	5.4	4	7.1	7	12.5	5	9.0	56	100
Reo Motors	1	2.9	2	5.7	3	8.6	3	8.6	4	11.4	3	8.6	6	17.1	4	11.4	4	11.4	5	14.3	35	100
Motor Wheel	1	2.1	3	6.3	4	8.4	4	8.4	6	12.5	7	14.6	6	12.5	4	8.4	3	6.3	10	20.9	48	100
Total	4	1.3	30	9.7	37	11.9	32	10.3	41	13.2	30	9.7	32	10.3	32	10.3	27	8.7	45	14.6	310	100

TABLE XVIII

BIRTHPLACE OF EMPLOYEES OF SELECTED PLANTS

Plants	Birthplace															
	Lansing		Michigan		Foreign Born		Nearby State		South		Other States		Lansing Left Once		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	35	20.5	64	37.4	18	10.5	21	12.3	21	12.3	9	5.3	3	1.8	171	100
Fisher Body	8	14.3	16	28.6	5	8.9	10	17.9	7	12.5	4	7.1	6	10.7	56	100
Reo Motors	9	25.7	12	34.3	2	5.7	6	17.1	3	8.6	2	5.7	1	2.9	35	100
Motor Wheel	4	8.3	20	41.7	7	14.6	9	18.8	5	10.4	2	4.2	1	2.1	48	100
Total	56	18.1	112	36.1	32	10.3	46	14.8	36	11.6	17	5.5	11	3.5	310	100

TABLE XIX

MARITAL STATUS OF EMPLOYEES OF SELECTED PLANTS

Plants	Marital Status											
	Single		Married		Divorced		Widowed		Separated		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	12	7.0	150	87.7	4	2.3	3	1.7	2	1.2	171	100
Fisher Body	4	7.1	52	92.9	--	--	--	--	--		56	100
Reo Motors	4	11.4	29	82.9	2	5.7	--	--	--		35	100
Motor Wheel	1	2.1	46	95.8	1	2.1	--	--	--		48	100
Total	21	6.8	277	89.4	7	2.3	3	1.0	2	0.6	310	100

TABLE XX

YEARS IN LANSING LABOR MARKET OF EMPLOYEES OF SELECTED PLANTS

Plants	Years in Lansing Labor Market																					
	6 mos.		6 mos.-1 yr.		1 yr.-2 yr.		2 yr.-3 yr.		3 yr.-5 yr.		5 yr.-7 yr.		7 yr.-10 yr.		10 yr.-15 yrs.		15 yr.-20 yrs.		20 yrs.		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	1	0.6	1	0.6	4	2.3	6	3.5	21	12.3	9	5.3	12	7.0	21	12.3	29	17.0	67	39.2	171	100
Fisher Body	3	5.4	2	3.6	1	1.8	3	5.4	8	14.3	4	2.3	3	5.4	9	16.1	8	14.3	15	26.8	56	100
Reo Motors	--	--	1	2.9	--	--	1	2.9	3	8.6	2	5.7	1	2.9	2	5.7	5	14.3	20	57.1	35	100
Motor Wheel	--	--	1	2.1	1	2.1	2	4.2	2	4.2	4	8.4	2	4.2	8	16.8	6	12.5	23	47.9	48	100
Total	4	1.3	5	1.6	6	1.9	11	3.5	34	11.0	19	6.1	18	5.8	40	12.9	48	15.5	125	40.3	310	100

TABLE XXI

TIME EMPLOYED BY PRESENT CONCERN OF EMPLOYEES OF SELECTED PLANTS

Plants	Time Employed by Present Concern																					
	6 mos.		6 mos.-1 yr.		1 yr.-2 yr.		2 yr.-3 yr.		3 yr.-5 yr.		5 yr.-7 yr.		7 yr.-10 yr.		10 yrs.-15 yrs.		15 yrs.-20 yrs.		20 yrs.		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	3	1.8	6	3.6	7	4.1	15	8.8	21	12.3	10	5.8	16	9.4	23	13.5	32	18.7	38	22.2	171	100
Fisher Body	8	14.3	2	3.6	5	8.9	2	3.6	9	16.1	2	3.6	1	1.8	9	16.1	12	21.4	6	10.7	56	100
Reo Motors	3	8.6	2	5.7	2	5.7	2	5.7	3	8.6	1	2.9	2	5.7	2	5.7	4	11.4	14	40.0	35	100
Motor Wheel	1	2.1	1	2.1	1	2.1	3	6.3	5	10.4	1	2.1	5	10.4	3	6.3	10	20.8	18	37.5	48	100
Total	15	4.8	11	3.5	15	4.8	22	7.1	38	12.3	14	4.5	24	7.7	37	11.9	58	18.7	76	24.5	310	100

TABLE XXII

NUMBER OF COMPANIES (1940-1951) IN WHICH EMPLOYEES OF SELECTED PLANTS HAVE WORKED

Plants	Number of Companies														Total	
	1		2		3		4		5		6		7		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	96	56.1	36	21.1	22	7.1	8	4.7	7	4.1	2	1.2	--	--	171	100
Fisher Body	30	53.6	8	14.3	5	8.9	4	7.1	3	5.4	4	7.1	2	3.6	56	100
Reo Motors	22	62.9	3	8.6	3	8.6	4	11.4	3	8.6	--	--	--	--	35	100
Motor Wheel	31	64.6	8	16.7	7	14.6	2	4.2	--	--	--	--	--	--	48	100
Total	179	57.7	55	17.7	37	11.9	18	5.8	13	4.2	6	1.9	2	0.6	310	100

TABLE XXIII

UNION MEMBERSHIP OF EMPLOYEES OF SELECTED PLANTS

Plants	Union Membership					
	Non-Union		Union		Total	
	Count	%	Count	%	Count	%
Oldsmobile	45	26.3	126	73.7	171	100
Fisher Body	12	21.4	44	78.6	56	100
Reo Motors	12	34.3	23	65.7	35	100
Motor Wheel	11	22.9	37	77.1	48	100
Total	80	25.8	230	74.2	310	100

TABLE XXIV

EDUCATION OF EMPLOYEES OF SELECTED PLANTS

Plants	Education																	
	None		1-6th		7-8th		9-10th		11-12th		College 1-2 yrs.		College 2 yrs. or more		College Graduate		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	2	1.2	18	10.5	30	17.5	41	24.0	64	37.4	10	5.8	6	3.5	--	--	171	100
Fisher Body	2	3.6	7	12.5	10	17.9	10	17.9	24	42.9	2	3.6	--	--	1	1.7	56	100
Reo Motors	--	--	2	5.7	10	28.6	7	20.0	11	31.4	4	11.4	1	2.9	--	--	35	100
Motor Wheel	1	2.1	4	8.4	11	22.9	15	31.3	16	33.3	1	2.1	--	--	--	--	48	100
Total	5	1.6	31	10.0	62	19.7	73	23.5	115	37.1	17	5.5	7	2.3	1	0.3	310	100

TABLE XXV

INCOME OF EMPLOYEES OF SELECTED PLANTS

Plants	Income																					
	$1		$1-1.24		$1.25-1.49		$1.50-1.74		$1.75-1.99		$2-2.24		$2.25-2.49		$2.50-2.74		$2.75-2.99		N/A		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Oldsmobile	--	--	1	0.6	6	3.5	91	53.2	38	22.2	18	10.5	6	3.5	1	0.6	1	0.6	9	5.3	171	100
Fisher Body	--	--	1	1.8	4	2.3	22	39.3	22	39.3	5	8.9	--	--	--	--	--	--	2	1.2	56	100
Reo motors	1	2.9	--	--	3	8.6	16	45.7	8	22.9	2	5.7	2	5.7	--	--	--	--	3	8.6	35	100
Motor Wheel	--	--	--	--	1	2.1	18	37.5	21	43.8	5	10.4	--	--	--	--	--	--	3	6.3	48	100
Total	1	0.3	2	0.6	14	4.5	147	47.4	89	28.7	30	9.7	8	2.6	1	0.3	1	0.3	17	5.5	310	100

TABLE XXVI

OCCUPATIONAL LEVEL OF EMPLOYEES OF SELECTED PLANTS

Plants	Occupational Level							
	Unskilled		Semi-Skilled		Skilled & Foreman		Total	
	Count	%	Count	%	Count	%	Count	%
Oldsmobile	16	9.4	118	69.0	37	21.7	171	100
Fisher Body	9	16.1	39	69.6	8	14.3	56	100
Reo Motors	2	5.7	22	62.9	11	31.4	35	100
Motor Wheel	5	10.4	28	58.3	15	31.3	48	100
Total	32	10.3	207	66.8	71	21.9	310	100

TABLE XXVII

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON SIZE OF COMPANY

Size of Company	Respondents	Non-Respondents	Total
		Percentages	
-5	3.2	4.9	4.0
5-24	7.1	15.6	11.1
25-99	7.8	11.5	9.6
100-499	8.9	12.3	10.5
+500	73.0	55.6	64.9
Total	100.0	100.0	100.0
Number of Cases	281	243	524

$$x^2 = 18.9 \quad d.f. = 4 \quad p. < .001$$

TABLE XXVIII

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON PLANT WORKING AT TIME OF STUDY

Plant Working	Respondents	Non-Respondents	Total
	Percentages		
Oldsmobile	35.6	27.1	31.5
Fisher Body	13.2	7.0	10.2
Reo Motors	8.2	4.7	6.5
Motor Wheel	10.0	7.8	8.9
Drop Forges	5.4	5.8	5.6
All Other	27.9	47.7	37.4
Total	100.0	100.0	100.0
Number of Cases	281	258	539

$x^2 = 25.8$ d.f. $= 5$ p. $<$ .001

TABLE XXIX

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON NATURE OF INDUSTRY

Nature of Industry	Respondents	Non-Respondents	Total
	Percentages		
Construction	3.6	8.7	6.1
Manufacturing, Metal and other	11.8	14.9	13.3
Transportation and Government	4.6	8.0	6.3
Wholesale and Retail Trade	2.5	6.2	4.3
Services	6.4	10.5	8.5
Auto	63.7	43.8	53.9
Drop Forge	7.5	8.0	7.7
Total	100.0	100.0	100.0
Number of Cases	281	276	557

$x^2 = 26.9$ d.f. $= 6$ p. $<$ .001

TABLE XXX

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON UNION MEMBERSHIP

Union Membership	Respondents	Non-Respondents	Total
	Percentages		
Non-Union	32.7	41.7	36.9
Union	67.3	58.3	63.1
Total	100.0	100.0	100.0
Number of Cases	281	247	528

$$x^2 = 50.9 \quad d.f. = 1 \quad p. < .001$$

TABLE XXXI

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON OCCUPATIONAL LEVEL

Occupational Level	Respondents	Non-Respondents	Total
	Percentages		
Unskilled	10.0	6.7	9.7
Semi-skilled	59.4	69.5	58.7
Skilled and Foreman	28.5	22.3	29.5
Sales, etc.	2.1	1.4	2.0
Total	100.0	100.0	100.0
Number of Cases	281	364	545

$$x^2 = 14.4 \quad d.f. = 7 \quad .01 < p. < .001$$

TABLE XXXII

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON TYPE OF OWNERSHIP OF PLANT

Type of Ownership	Respondents	Non-Respondents	Total
	Percentages		
Local	44.8	57.9	51.0
State	1.4	2.3	1.9
Other	53.7	39.8	47.1
Total	100.0	100.0	100.0
Number of Cases	281	256	537

$x^2 = 10.5$ d.f. = 2 $.01 < p. < .001$

TABLE XXXIII

COMPARISON OF RESPONDENTS WITH NON RESPONDENTS
BASED ON INCOME

Income	Respondents	Non-Respondents	Total
	Percentages		
$1.24	1.8	6.1	3.9
$1.25-1.49	6.4	11.7	9.0
$1.50-1.74	44.1	37.3	33.9
$1.75-1.99	23.5	25.1	24.8
$2.00-2.24	11.0	8.0	9.5
$2.25-2.49	4.3	4.5	4.4
$2.50	3.5	3.0	3.3
N/A	5.3	7.2	6.3
Total	100.0	100.0	100.0
Number of Cases	281	256	547

$x^2 = 17.5$ d.f. = 6 $.01 < p. < .001$

TABLE XXXIV

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON MARITAL STATUS

Marital Status	Respondents	Non-Respondents	Total
	Percentages		
Single	5.7	9.1	7.3
Married	94.3	90.9	92.7
Total	100.0	100.0	100.0
Number of Cases	281	252	533

$$x^2 = 2.3 \quad d.f. = 1 \quad .20 < p. < 0.10$$

TABLE XXXV

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON BIRTHPLACE

Birthplace	Respondents	Non-Respondents	Total
	Percentages		
Lansing	20.7	18.3	19.5
Michigan	35.2	45.2	40.1
South	13.9	11.8	12.9
Foreign	10.0	7.6	8.8
Other	20.3	17.1	18.8
Total	100.0	100.0	100.0
Number of Cases	281	263	544

$$x^2 = 5.8 \quad d.f. = 4 \quad .30 < p. < 0.20$$

TABLE XXXVI

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
BASED ON AGE

Age	Respondents	Non-Respondents	Total
	Percentages		
24	7.8	9.7	8.7
25-34	22.7	24.8	23.8
35-44	24.9	20.5	22.9
45-54	21.7	16.3	19.1
55	22.9	28.7	25.6
Total	100.0	100.0	100.0
Number of Cases	281	258	559

$$x^2 = 5.8 \quad d.f. = 4 \quad .30 < p. < 0.20$$

TABLE XXXVII

COMPARISON OF RESPONDENTS WITH NON-RESPONDENTS
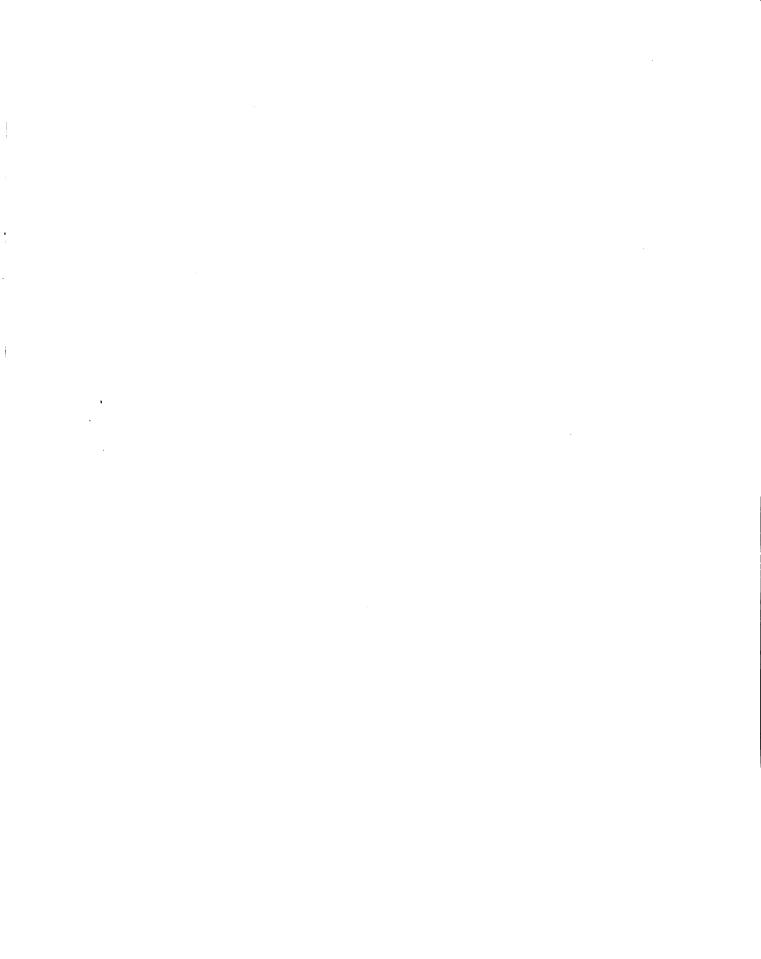BASED ON NUMBER OF DIFFERENT COMPANIES
WORKED AT IN LANSING (1940-1951)

Number of Companies	Respondents	Non-Respondents	Total
	Percentages		
1 or 2	72.2	69.2	70.8
3 or more	27.8	30.8	29.2
Total	100.0	100.0	100.0
Number of Cases	281	280	531

$$x^2 = .6 \quad d.f. = 1 \quad .50 < p. < 0.30$$

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