

THE ACCEPTANCE OF WORK-RELATED VALUES
BY YOUNG RURAL JAPANESE

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ABSTRACT

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by David Michael Lewis

This dissertation examines the relationship between position in the rural Japanese family according to sex and order of birth, and the acceptance of selected work-related values.

Previous studies of industrial work situations in Japan indicate that the role of the male is more likely to require the acceptance of work-related values relevant to effective participation in industry than is that of the female. These same studies indicate that the role of the non-first-born youth is likely to require a greater acceptance of these values than that of the first-born youth. It is assumed, for the purpose of the thesis, that in the course of their socialization, rural Japanese children will be prepared for future work roles. It is hypothesized that this preparation will result in a differential acceptance of work-related values which will vary according to the sex and birth-order characteristics of the respondent.

For the development and tests of hypotheses the respondents are arranged in three categories according to their sex and order of birth. The first category contains non-first-born males; these respondents possess both of the characteristics accepted as predisposing toward the acceptance of values relevant to effective participation in industrial work situations. Therefore, persons in this category can be expected to indicate the greatest acceptance of the work-related values with which the study is concerned. The second category contains first-born males and non-first-born females; each of these individuals possesses one of the attributes considered to predispose respondents toward acceptance of the work-related values. The third category contains first-born females; these individuals possess neither of the characteristics considered to predispose respondents toward the acceptance of the work-related values being studied.

Two hypotheses were developed for testing against the data secured for this study. These stem from the basic theoretical proposition that children's orientations to values vary according to their future roles in the society. This study is particularly concerned with the relationship between work roles and relevant work-related values. The first of the hypotheses deals with the

general nature of this relationship, and states that the extent of a respondent's acceptance of work-related values will vary according to his possession of those attributes of sex and birth order predisposing toward the acceptance of those same values. Thus it is hypothesized that the respondents in Category I will show the greatest acceptance of these values, those in Category III the least acceptance, and those in Category II an intermediate degree of acceptance.

The second hypothesis deals with the association between the acceptance of values that indicate a willingness to disrupt ties to the family and rural environment and the acceptance of the remaining work-related values selected for study. The hypothesis holds that this association will vary in the same manner as the general acceptance of work-related values as stated in the first hypothesis. Thus, the closest association is hypothesized for those respondents in Category I, the least for those in Category III, and an intermediate degree of association for those in Category II.

These hypotheses were tested against data secured from all ninth-grade students from Emi Town, Chiba Prefecture, Japan. The data consist of responses to a questionnaire, administered in

classrooms, designed to indicate the respondent's acceptance or nonacceptance of work-related values.

The results of the analysis of data provide support for both hypotheses and they are accepted as indicating that the characteristics of sex and birth order exert a definite, predictable, influence upon the acceptance of work-related values by young rural Japanese. A discussion of the limitations of the study indicates the research needed for further understanding of the relationship between position in the rural Japanese family and the acceptance of work-related values.

THE ACCEPTANCE OF WORK-RELATED VALUES

BY YOUNG RURAL JAPANESE

By

David Michael Lewis

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

A century ago Japan was a nation on the threshold of modernization. Poor in resources, feudal in political tradition, and outside the mainstream of Western industrialization, Japan has risen in this brief period to the industrial leadership of Asia. The Japanese are the one Asian people who have thus far achieved an extensive industrialization of their economy (Lockwood 1955a: 129; 1955b: 538). However, since the orientations within any society are likely to differ toward the values related to participation in various situations found in such a society, this thesis will examine differences of orientation to work-related values relevant to participation in industrial work situations in Japan.

The persons whose orientations are the subject of this study are young rural Japanese. A sample survey of such young people in the final year of their compulsory schooling will provide the necessary data. Their orientations to industrially relevant

work-related values are particularly important, for if such orientations are characteristic of rural Japanese society they should be particularly evident among the young people most likely to participate in the industrial labor force. From the beginning of the modern era in Japan the urban areas have drawn heavily upon the rural population for workers in industry, and at present a major portion of these workers of rural origin consists of young people who have just completed their nine years of compulsory schooling. Thus many, perhaps a majority, of the sample of young people studied will begin to participate in industrial work situations soon after completing this final year of compulsory schooling.

For the purposes of this study it is assumed that the effectiveness with which these young people participate in the industrial segment of Japanese society will in part be determined by their acceptance of these work-related values. Since it can be expected that they will differ in their orientations, this poses the problem of determining the factors most generally associated with these differences. Contemporary studies of rural Japan suggest that sex and order of birth within the family are closely associated with differences in orientation to values and the behavior indicative of such orientations (Beardsley et al. 1959; Caudill and Scarr 1962; Dore 1959; Stoetzel 1955). Therefore, this

study will concentrate upon the relation of these two factors to differences in orientations to work-related values.

These differences in social position determine in part the aspects of Japanese culture to which these young people have access, especially those which will be transmitted to them in the course of growing up (Beardsley et al. 1959:69-70, 221, 236-37, 244, 299, 312; Dore 1958:150-51; DeVos and Wagatsuma 1961:1223). The major part of their socialization takes place within the institutions of the family and the school. Although the role of the school in the development of orientations to work-related values will be examined, the major aim of this thesis is to determine what effect position within the family, operationally specified by sex and birth order, has upon orientations to work-related values relevant to effective participation in industry.

The framework of analysis utilized in this study has been suggested by Parsons and Bales's discussion of sex roles and orientation to values. These authors assert that:

It is, in our view, not tenable to assert, as is sometimes done, that in a broad and generalized way the sexes have fundamentally different value-orientations. This would be incompatible with the paramount necessity, if their roles are to be integrated with each other, for them to share common values.

. . . as members of the overall society, men and women share the common value system of that society. But they typically have differential participations in the subsystem

structures of the society, and each of these participations carries with it a differentiated subsystem of the generalized value system. On this more differentiated level, wherever men and women cooperate in solidary collectives they must, however sharply differentiated their roles, share the values of the relevant collectivity, so far as it is integrated. But because these participations are different, these various sub-value systems have different orders of importance in the typical personality structures of men and women. . . . The difference lies . . . in the different levels of personal commitment to the implementation of different sub-categories of the overall shared value system. This is a function of role which . . . is differentiated within the same system. It would, therefore, be in our sense misleading if we were to speak mainly of sex-value differentiation. We recognize, that, since value-internalization is an essential aspect of role-assumption, the concrete internalized role value-pattern component of the personalities of the sexes is different in organization. But it is only that particular aspect of value-orientation which is a function of the roles, which is involved. It is not because the sexes have different values that they tend to assume different roles but, being socialized to assume different roles, they must organize their common value-heritage differently in order to implement it effectively in their respective roles. [Parsons and Bales 1955:164-65]

In this thesis the above approach to differences in orientation to values is extended to encompass differences in order of birth within the family. I propose that the characteristic of order of birth, as well as that of sex, is an important determinant of differential participation in the subsystem structures of Japanese society. The combined effects of these characteristics should produce noticeable differences in orientations to values.

I consider this analytic framework to be of particular value for this study for several reasons.

The characteristics of sex and birth order have long been considered important in the socialization of young Japanese. These are objective characteristics which can be readily determined by researchers. If this study can provide some insight into the relation of these characteristics to orientations to work-related values, then it will contribute to the growing body of knowledge of the factors associated with differential participation in Japanese society.

These orientations are widely recognized as contributing to effective participation in one of the more important subsystems of any modern industrial society, the industrial labor force. It may be that if these characteristics are associated with orientations to values relevant to participation in this subsystem, they may also be related to orientations to values relevant to participation in other subsystems of Japanese society, and this study may suggest a fruitful approach to their investigation.

The pragmatic value of this research is that it will suggest an operational specification for the general belief, held by those concerned with the recruitment of workers for the Japanese industrial labor force, that some rural youths (particularly non-first-born males) possess "personality" attributes which fit them especially well for participation in this labor force. That is, this

study will attempt to identify some of the specific orientations underlying the empirically observed behaviors which have given rise to this belief, which in turn should be of value in the further rationalization of personnel selection.

For the purpose of this thesis, the industrial labor force is considered the subsystem most relevant to the subvalue system constituted by the work-related values under investigation. The differential participation of males and females in this subsystem will be illustrated through reference to previous studies of Japanese industrial situations, and through examination of Japanese labor-force statistics. The differential participation of first-born males and non-first-born males will be illustrated similarly. Since previous research provides no information on differential participation of first-born females and non-first-born females, I will assume for the present purpose that the effect of birth order among females is similar to that among males.

This study differs from the previous investigations of young rural Japanese discussed in the survey of literature in one important respect: It controls for the effect of both sex and birth order upon orientations to values. This is important because the tradition of primogeniture and emphasis upon hierarchical relationships persistent in rural Japan can be expected to

exert a differential influence upon those young people whose social position varies in accordance with these characteristics. Since the previous studies have not exerted simultaneous control over these variables, it has not been possible to determine whether conclusions attributing differences to the effect of one might not in fact be attributable to the influence of the other. This study is an attempt to resolve this problem.

Work-related Values

For this study I have accepted the definition of a value as “. . . a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action” (Kluckhohn et al. 1954: 395).

I am concerned with the selections, or types of choices, which must be made by young rural people in participating in the industrial labor force. For this reason I have selected a number of values which I believe are particularly relevant to the decisions young rural Japanese must make as they prepare to enter into and participate in the occupational system of Japan. These are grouped into six general value areas on the basis of what I

believe to be the manifest content of items indicating the acceptance or nonacceptance of specific values.

The general value areas which I have delineated are "orientation to work," "orientation to structured time," "orientation to physical mobility," "orientation to change," "orientation to the determination of future events," and "orientation to occupational and economic advancement." The decision as to whether the content of each of these areas is homogeneous enough to reflect the acceptance of a single general value will be based upon an empirical test of unidimensionality provided by scalogram analysis.

I recognize that these values have their counterparts in many nonindustrial and preindustrial societies. What differs in this case is not the values per se but the social and cultural contexts in which orientations to them develop and the situations in which they can be expected to influence behavior. There is evidence of the importance of such values for Japanese during the preindustrial and early industrial periods of the development of Japanese society (Bellah 1957:14-16; Loomis 1960:81-82; Sheldon 1958:95-96, 98, 141-42; Smith, R. J. 1960:243; Smith, T. C. 1960:106-7; Taeuber 1958:26-27, 169) and, thus, a historical basis for the existence of such values among contemporary Japanese. Given the existence of such values, my concern is with

the evident effect of position within the rural Japanese family upon the development of orientations to these values and the consequent differences in emotional or psychological suitability for effective participation in modern industrial work situations.

The selected value areas which will be examined in this study are presented in tabular form on the following page. For each general value area I have listed the more specific subareas, each of which is based upon a specific work-related value. The heading which identifies each subarea indicates the emphasis most conducive to effective participation in an industrial occupational system. A discussion of these value areas follows.

Orientation to work

In an industrial society there is usually an emphasis upon extrinsic rewards as an incentive to work, of which the most common is money or wages paid for labor. Since the employee is assumed to be working for money, if more work is wanted from him one pays him more money (Anderson 1959:322; Chinoy 1955:xii; Gross 1958:425; Mills 1951:219; Tumin 1960:281; Whyte 1952:219-20).

Numerous instances have been cited of workers from non-industrial societies whose orientation to work is such that their

TABLE 1.--General value areas and subareas.

General Value Areas	Subareas
I. Orientation to work	<ol style="list-style-type: none"> 1. Acceptance of monetary reward as an incentive to work. 2. Acceptance of the desirability of steady employment and income. 3. Acceptance of work as necessary for a feeling of security. 4. Acceptance of hierarchical work relationships.
II. Orientation to structured time	<ol style="list-style-type: none"> 1. Acceptance of the desirability of promptness. 2. Acceptance of repetitive activity. 3. Acceptance of the desirability of scheduling activities.
III. Orientation to physical mobility	<ol style="list-style-type: none"> 1. Acceptance of the disruption of established kinship ties. 2. Acceptance of the disruption of established community ties.
IV. Orientation to change	<ol style="list-style-type: none"> 1. Acceptance of the desirability of change. 2. Acceptance of the desirability of that which is new. 3. Acceptance of a break with tradition.
V. Orientation to the determi- nation of future events	<ol style="list-style-type: none"> 1. Acceptance of the desirability of self-determination of events. 2. Acceptance of the desirability of optimism. 3. Acceptance of the desirability of faith in the probability of success.
VI. Orientation to occupational and economic advancement	<ol style="list-style-type: none"> 1. Acceptance of the desirability of education. 2. Acceptance of the desirability of thrift. 3. Acceptance of the desirability of hard work.

decisions are not influenced by this particular incentive. In these cases it may be difficult, or impossible, to secure workers through the offer of money alone. Or, once workers have been secured, it may be found that they do not readily respond with increased output to offers of more money (Mead 1955:244).

In an industrial society there is a stress upon the desirability of steady work and its accompanying steady income. When this steady work and income are interrupted, the worker suffers not only economically but emotionally as well (Mills 1951:230-31; Whyte 1952:223). Workers from nonindustrial societies may be quite resistant to the development of this favorable orientation toward regularity of employment so basic to the continued smooth functioning of an industrial economy. The desire for monetary reward is often quickly satisfied among such workers (Belshaw 1960:101; Mead 1955:245; Whyte 1952:223).

Obviously, it is not necessarily money itself that is positively evaluated by the worker who is committed to the industrial way of life. The steady income which is a consequence of steady employment may be for the worker a source of prestige, a means for acquiring material possessions, or a means for alleviating anxiety about sickness, accident, or the infirmities of old age (Belshaw 1960:99-100; Gross 1958:431; Mills 1951:230-31).

The recognition and acceptance of hierarchical work relationships is particularly crucial for the smooth functioning of such large-scale organizations as the bureaucracy and the factory. Orientations favoring the acceptance of such relationships are not, of course, limited to industrial societies. However, as is true of all the orientations examined in this study, its presence in a nonindustrial society would suggest that its members would more easily adapt to the process of industrialization than members of a society lacking such an orientation (Henry 1961:204; Loomis 1960:89; Nash 1958:30-31; Whyte 1952:231-33).

Orientation to structured time

Repetitive activity, the scheduling of activities, and promptness in meeting such schedules are primary characteristics of the demands of industrial living. The stated hours and regularity of attendance required in a factory demonstrate the importance of these orientations for maintaining an industrial society (Anderson 1959:345; Elkan and Fallers 1960:240, 255; Feldman and Moore 1960:76; Gross 1958:446, 451; Loomis 1960:79; Nash 1958:25-27; Weil 1962:453-56). The worker in a nonindustrial society may have a similar orientation to structured time. This would appear to be particularly true if he has been educated in a school, which,

like the factory, requires regular attendance and employs a daily routine (Gross 1958:452-53; Morris 1960:188; Nash 1958:27-28).

Orientation to physical mobility

Extensive physical mobility is a concomitant of industrialization and a basic characteristic of modern industrial society. In every such society a large proportion of its population has had to find jobs not only considerably different from those of their parents but often physically distant as well. This is particularly true of young migrants from rural areas. Their necessary migration to the city demands of them an orientation to physical mobility which must include a willingness to disrupt, if only partially and temporarily, established ties to kin and community. To participate effectively in an urban industrial labor force they must at least reject kinship and community ties which, held to the extreme, would prevent their assuming new occupational roles or greatly impede their responses to occupational opportunities (Feldman and Moore 1960:67; Gross 1958:288; Henry 1961:207-8; Lipset and Bendix 1960:11; Mead 1955:248; Nash 1958:111, 113; Tumin 1960:285).

Orientation to change

Change is an ever-present element of urban industrial work. This is in part an urban phenomenon, for throughout history the city has been the center of change. In addition, industrialization of a previously nonindustrialized area means a qualitative change of economy, frequently a fundamental alteration in the demand for existing skills, and the perfection of new techniques and organization. Industrial work is likely to be less stable than nonindustrial work, and workers may find the special tasks that they have learned to do well changing on short notice.

If young people from farms and agricultural communities are to adjust satisfactorily to urban industrial living, they must have an orientation favoring change and at least some degree of willingness to break with tradition (Anderson 1959:2, 326-27; Gregory 1960:141; Lerner 1958:49-50; Nash 1958:33; Sjoberg 1959:343-44).

Orientation to the determination of future events

In an industrial society the individual must be able to make numerous decisions in recurring problematic situations. The mere existence of varied status-roles and rewards for occupying them means that the individual must constantly choose among

alternatives. Characteristically the individual must make such decisions himself. He will be better able to participate in industrial society if he conceives the future as manipulable rather than ordained, and sees his own future in terms of achievement and success. These orientations in conjunction with an optimistic orientation to the future should lead to a more effective participation in an industrial occupational system (Gross 1958:466; Lerner 1958:48; Lewis and Stewart 1961:102-3; McClelland 1961:222).

Orientation to occupational and economic advancement

Of the orientations which are helpful for those who want to move upward in the social structure of an industrial society, three have been selected as exceptionally important. They are orientations which stress the importance of education, thrift, and hard work as a means of achieving highly valued status-roles, and are generally considered necessary for upward social mobility in industrial societies (Chinoy 1955:131; Henry 1961:203; Hyman 1953:427; Lipset and Bendix 1960:1-5, 56, 91, 227; Warner and Abegglen 1955:20-21; Weber 1930:170-71).

Orientations such as those described above are evidently available for adoption by young Japanese. The following discussion

of the Japanese school indicates that this institution may serve as a source of such orientations to work-related values.

The Japanese School as a Source of Work-related Values

The school in Japan, as in other nations, is a major agency for the socialization of children. It may be one of the more important sources of orientations to values exhibited by the young. This section will describe the objectives of the moral education courses taught in Japanese primary and secondary schools, and will show that these courses can serve as a source of work-related values which may be adopted by Japanese students. This discussion is based upon the list of objectives of moral education courses published by the Japanese Ministry of Education (Japan, Ministry of Education 1960:38-42); the objectives most directly related to the values examined in this study are selected for discussion.

The statement of objectives of the moral education course implies a major emphasis upon the value of self-determination, oriented to successful achievement. The course aims to teach students self-reliance, to express opinions, and to act according to their own beliefs. They are taught to overcome difficulties and

hardships, and to persist in the accomplishment of their purposes without being daunted by difficulties or failures. In accordance with this orientation specific emphasis is placed upon teaching students to recognize their own special abilities and strengthen them, to set a high goal for themselves, to strive for a definite purpose, and to be ambitious.

Another main objective of the moral education course is to teach students to make effective use of time, to order their pattern of living. In the primary grades particular emphasis is placed upon the need for punctuality. In the secondary grades there is a major emphasis upon the effective use of time and punctuality with reference to a planned schedule of activities.

There are several stated aims that indicate a positive orientation to change. Students are taught that they should try to improve their lives through the use of original ideas, that they should attempt to create new ideas and methods which will prove of value to them. Particular emphasis is placed upon the application of these new ideas to their own lives.

The statement of objectives indicates that ambition is fulfilled through thrift, study, and hard work. The students are encouraged to recognize the value of money, to learn to spend it effectively and avoid waste. They are enjoined to cultivate and

maintain a studious attitude and to pursue truth and knowledge.

In relation to work, they are taught to be diligent and to cooperate actively in working with others.

This brief description of the aims of the moral education course which is taught in Japanese schools demonstrates that the educational system of Japan fosters the development of positive orientations to industrially relevant work-related values on the part of its students. Thus the school serves as a source of such orientations. In the analysis of data secured for this study an attempt will be made to determine whether such orientations, which are emphasized by the educational system, are differentially selected by young Japanese who can be expected to differ in their participation in the occupational subsystem.

Sex and Order-of-Birth Differences among Workers in the Industrial Labor Force of Japan

In this section I shall examine a number of recent studies selected for their descriptions of certain common types of industrial organization found in Japan. These descriptions will be examined for illustrations of differences in the roles of male and female workers, and first-born and non-first-born male workers, in the industrial labor force. I shall be particularly concerned

with what this material suggests as to differences in length and degree of commitment of these several categories of Japanese to the industrial labor force.

Male-female differences

Abegglen's study of a small silk-weaving factory near Tokyo (Abegglen 1958) describes a work situation in which many junior high school graduates, especially females, participate. There are nineteen employees in this factory, of whom fifteen are females. The girls are from farm homes in the surrounding villages. Their employment has been arranged between the factory owner, Mr. Watanabe, and their parents. They live in the Watanabe house, their food is prepared with the family's, and they celebrate holidays with the family. Mr. Watanabe acts as a parent in relation to them. Typically the girls enter the plant just after junior high school graduation, serve a three-year apprenticeship, work several more years, then marry (Abegglen 1958: 72-73).

Abegglen describes the plan as follows:

The workshop itself is a crowded, noisy, loom-filled room presided over by an older man, a foreman. There are other men on the payroll: a mechanic charged with maintenance of the machines; a silk specialist who supervised the quality of the material, its handling, and the designs produced; and a young boy learning the trade who acts as messenger and general handyman. Each of the girls in the shop is responsible for two looms, set facing each other,

between which she stands at her work. The atmosphere of the shop is one of steady, rather rapid work, but at the same time there is a good deal of conversation, joking, and moving around within the group of girls.

. . . The niceties of labor laws governing wages, hours, unionization, and similar factors do not penetrate the shop with any regularity. Apart from provision for insurance as required by law and occasional visits by a government official, this is the exclusive fiefdom of Mr. Watanabe. The hours are governed by work demands and extend to well over 60 hours each week. The wages are low indeed, and consist largely of the food, lodging, clothing, and care as one would provide for a large and slightly improvident group of relatives. . . . There is little leisure, and the Sunday holiday is spent largely in small domestic tasks. . . . This interval in the workers' lives, the five or seven years between school and marriage, is part of the accepted scheme of things for these girls, an interval in which they are cared for and in which they work in a fashion not at all inconsistent with their backgrounds. [Abegglen 1958: 73-74]

It can be seen from this description that these girls do not have a long-term commitment to the industrial labor force. Their period of participation in the labor force is a temporary brief interlude in their life pattern, the interval between school and marriage, after which they can be expected to assume the more traditional roles of mother and housekeeper. It is also evident that the men in this factory hold the more permanent and prestigious positions. They perform the jobs of foreman, silk specialist, and mechanic. In addition there is a young boy who acts as messenger and handyman. It is notable that this boy is learning the trade, and has thus assumed a long-range commitment

to the labor force. These positions contrast noticeably with the routine operation of the looms which is the only job held by the girls. These girls are paid largely in food, clothing, and the necessities of life rather than in money or wages, which is further evidence that their work situation does not encourage a primarily industrial orientation.

Abegglen's (1958) discussion of the hiring practices of Japanese factories gives further evidence of the greater involvement of males in the industrial labor force, and of their greater commitment to it.

He notes that in hiring new laborers the personnel departments of factories prefer to hire young men aged fourteen to fifteen, just out of junior high school, who are living in rural areas but are strongly desirous of finding urban factory employment (Abegglen 1958:22). Presumably, rural males who have just completed their compulsory schooling are considered to be particularly suitable as industrial workers; they should therefore exhibit orientations which are most conducive to effective participation in lower-level positions in an industrial work force.

A general view of the work situation in a large textile factory is provided by Lawrence Olson in his "Human Relations in a Japanese Factory" (Olson 1955b). The company, which he

refers to as the Dai Ichi Rayon Company, is a relatively new one with nine plants throughout Japan. The factory he describes employs about eight thousand people in a large compound on the edge of a city of one hundred thousand persons (Olson 1955b:1-2).

The company employs predominantly young rural girls as mill hands. Their average age is about eighteen, and they have generally completed only the compulsory nine grades of public school. These girls sign one-year contracts with the company and live in company dormitories. These dormitories are rent-free, and their food is provided by a company cafeteria for less than four dollars a month. Much of the small salary paid to the girls they spend for the purchase of clothes and household goods, such as a small sewing machine. Here, as in the smaller textile factory, the period of factory employment for females represents an interlude in the girl's life during which to save some money and purchase household goods in anticipation of marriage after her brief employment (Olson 1955b:6-7).

Olson (1955a) has also described a small factory, a textile machinery manufacturing plant in Kyoto, which employs predominantly males. This plant, which he calls the Motonno Company, employs fifteen workers--thirteen men and two women.

All 15 employees--13 men and 2 women--live in Kyoto or its environs. . . . One-half of workers' transportation costs are paid as a commuting allowance, a practice common in Japanese industry. The legal work week is 48 hours, with Sundays off, but overtime is common. Time and a fifth is paid for overtime until 10 p.m., time and a half after 10 p.m. On one occasion when I left the premises at about 10:30 p.m. two men were still operating lathes. There is no shift work. The basic daily wage, exclusive of allowances, ranges from Y200 (US \$.55) a day for "beginners learning the trade" to Y500 (US \$1.38) a day for "top skills." There is no incentive pay, but fractional pay increases are granted each year. Bonuses of approximately one month's pay are paid at O-Bon, the Buddhist festival of the dead in August, and at the New Year. [Olson 1955a:7]

As is typical of such small concerns, this shop has no labor union. As the owner explained to Olson, "'We work as a family here.'" This means job security for employees as long as the business continues. Only one person appears to have been fired under the present ownership, and this was for theft. Length of employee service with the company ranges from one to twenty-five years, with an average length of three or four years. Most of the male workers are second- or third-born sons of rural origin. After a few years at a shop like Motono's they often move on to larger factories where salaries and working conditions are better (Olson 1955a:8).

The owner's general attitude toward his employees is paternalistic. His relationship to his men has remained essentially unchanged in his many years with the company. His view on labor

is expressed in his remark, “‘The only way to make a living is to work long hours. Everybody knows that.’” Some change is evident in the shop, however; though most new workers are still recruited through personal contacts or kinship, the public employment office is assuming more importance, and is at least occasionally used by the company to replace labor (Olson 1955a:8).

For the first time in the history of this plant, educational level is beginning to have some relation to the wage scale. Whereas in previous years all workers were elementary school graduates, now two employees are junior high school graduates and one is a high school graduate. Since the recent hiring of the high school graduate, the company has been giving consideration to educational qualifications in determining salary (Olson 1955a:8).

This plant can be considered rather typical of the type of small factory in which rural youths first participate in the industrial labor force of Japan. The average length of employee service, three to four years, does not differ noticeably from the length of service previously observed for female workers. However, it should be noted that after a few years at this small factory workers will move on to larger factories where they can secure higher wages. Thus small factories like this one appear to serve as a “training ground” where rural boys can gain basic

industrial skills with which they can advance in the industrial system. Their situation is quite different from that of the female workers who, after a similar length of service, leave the labor force to marry (Abegglen 1958:12).

One of the more typical small- and medium-class industries in Japan is metal toy manufacturing. A description of the general conditions prevailing in this industry is found in Yoshio Kobayashi's study (Yamanaka and Kobayashi 1957).

Approximately 90 percent (500 to 600 plants) of the metal toy factories are located in Tokyo. The primary characteristic of these factories is the smallness of the production unit. The smallest consists of two to three workers, usually the owner and members of his family, and the largest consists of 150 workers or so. Factories employing ten workers or less probably account for about half of the total production of the industry (Yamanaka and Kobayashi 1957:64). The larger factories usually employ a number of subcontract plants. Many of these are composed of a man, his wife, son or daughter, and perhaps a casual assistant worker.

The typical form of job-work is rather simple manual labor, and there is a predominance of women workers throughout the industry. In 1954 in Tokyo working hours were five to seven

hours per day for one or two weeks a month for casual workers. Casual female workers in the industry average about six or seven dollars a month, or about one-fourth of the wages female cotton mill operators usually earn in Japan. The casual female workers' wages are about half the average paid to the regular female workers in metal toy factories (Yamanaka and Kobayashi 1957:68-69).

The larger part of the female workers in this industry are under twenty, and some are only fifteen years old and have just completed their compulsory schooling. The average length of employment is less than three years.

Even in the small and medium-sized factories wages are low, and wages for males are typically higher than for females, as the following quotation indicates:

The wages are extremely low. Male workers on a 9-hour basis, earn \$22-25 (US Dollar) monthly on the average, and female workers \$14-17. In both cases income tax is included and there is no allowance in goods, such as food, etc.; wages for male workers are around 50%-60%, those for female workers 70%-80% of general average wages. We know of certain factories of comparatively good standing where both male workers and female workers are paid 33 cents per day or a little over 4 cents per hour for male workers and less than 4 cents for female workers, which are literally starvation wages even in Japan. In the years immediately following the recent war, wages in medium-small industries were, in some cases, better than those in large scale industries, but lately, their positions have been reversed and the difference is still increasing. The metal toy industry, in particular, falls within the category where workers' wages are on the lowest level, which is noteworthy, in view of the fact that both exports and

production are making a steady and conspicuous advance.
[Yamanaka and Kobayashi 1957:72-73]

There are a number of these small and medium-sized factories which employ predominantly male workers. In such plants the male workers generally come from the same rural area as the owner or managers of the factory, and worker and owner are in a master-apprenticeship relationship. In some cases workers are expected to establish affiliated factories after serving their apprenticeships.

The metal toy industry, in which female workers predominate, provides another illustration of the lesser rewards offered to females for participation in the industrial labor force, and is also suggestive of their lesser commitment to this labor force.

Women as unpaid family workers

The movement of rural females into the nonagricultural labor force in the postwar period has been influenced by a combination of continuing historical factors as well as factors of more recent origin. Throughout the history of industrialization in Japan the economic demands of the family and the need of industry for cheap labor have combined to send many females into the non-agricultural labor force (Taeuber 1958:115). This pattern is consistent with the values of Japanese culture wherein single

women have worked outside the home for wages, while married women have predominated in unpaid family labor within the family or in household enterprises (Taeuber 1958:115-16).

Rosovsky and Ohkawa (1961), in their discussion of the modern Japanese economy, are particularly concerned with the prevalence of family workers in Japan. These are workers who are not compensated by wages, and they represent a typical pre-modern form of employment. In recent years approximately one-third of the total labor force has worked under these conditions, and females have predominated in family employment by a large margin (Rosovsky and Ohkawa 1961:479-80).

These female family workers come primarily from the older age groups. Between the ages of fifteen and twenty-five, employed females are predominantly wage workers, but in the older age groups the proportion in family work becomes greater. This difference is probably the consequence of modern light industry's preference for young women, and a subsequent shift to family work following marriage (Rosovsky and Ohkawa 1961:481).

The employment of males shows a somewhat different relationship between age and employment in private business or unpaid family work. A relatively high proportion of younger males are engaged in family employment. However, in the peak earning

years, between the ages of thirty and sixty, the number of males engaged in family work drops so low as to be insignificant.

Thus it can be seen that males are a more important component than females of the modern industrial labor force in Japan. Women are more heavily concentrated in traditional sectors of the economy, employed as unpaid family workers.

The differences in the participation of males and females in the industrial labor force suggested by the above studies are supported by labor statistics for workers in Japan. For all workers in all industries in 1958, males had an average length of service of 7.4 years, while for females the equivalent figure was 3.9 years (Ministry of Labor, Women's and Minors' Bureau, Labor Statistics on Minor Workers, 1959:56).

The differences between wages paid male and female workers indicate the greater rewards for males through participation in the industrial labor force. In 1958 the average monthly cash earnings for males was 19,649 yen, while that for females was less than half this amount, or 8,803 yen.

Similarly, labor force statistics for unpaid family workers support the Rosovsky and Ohkawa statement about the high proportion of unpaid family workers who are female. Table 2 illustrates this for the period 1953-1958.

TABLE 2.--Male and female unpaid family workers in all industries for the years 1953-1958 (in thousands of persons).^a

Year	Total Unpaid Family Workers	Male		Female	
		No.	Pct.	No.	Pct.
1953	13,830	4,290	31.0	9,540	69.0
1954	13,760	4,190	30.4	9,570	69.6
1955	14,070	4,350	30.9	9,720	69.1
1956	13,480	4,030	29.9	9,450	70.1
1957	13,100	3,880	29.6	9,220	70.4
1958	12,680	3,770	29.7	8,910	70.3

^aBureau of Statistics, Office of the Prime Minister, Japan, **Figures of Labor Force Survey Concerning the Population 15 Years Old and Over: January 1953-December 1958, 1959, pp. 38-41.**

Summary

The preceding discussion has described the differential participation of Japanese males and females in the occupational subsystem of Japan. This discussion focused primarily on participation in the industrial labor force of Japan. It can be seen that males have more of a long-term commitment to participation in this labor force than do females, and that they derive greater monetary rewards from their participation. In the case of females, participation in the industrial labor force appears generally to be a brief interruption in their life pattern, which is more predominantly organized around the traditional roles of mother and housekeeper. The predominance of females among unpaid family workers indicates that much of the labor of females is performed in the home rather than in industry.

Differences Related to Order of Birth

This section will illustrate differences in participation in the industrial labor force of Japan which are associated with differences in order of birth. Differences in effectiveness of participation and of length and degree of commitment will receive particular attention. The primary focus will be upon differences in participation between males who are first-born sons and those

who are non-first-born sons. Discussion of order of birth differences in Japanese society has been concerned almost exclusively with differences between first-born and non-first-born sons, with little or no suggestion that like differences might exist between first-born and non-first-born daughters. Therefore, in this section previous literature will be examined for material on differences among males, and the analysis of data will explore the possibility of similar differences among females.

Most of the discussion of order-of-birth differences is concerned with rural males, particularly those of farm origin.

In Thomas C. Smith's (1960) study of modern Japanese business leaders, he indicates that the sons of landlords in Japan have, during the last century, provided a far higher proportion of leaders in government, politics, business, education, scholarship, science, and the arts than their numbers in the population would warrant. His detailed analysis focuses upon business leaders and the extent to which characteristics of this group apparently related to their success may be classified as traditional or modern (Smith, T. C. 1960:93).

Smith's data were secured from the biographies of 154 Presidents of companies ranking among the 323 largest in the country in 1956, and from questionnaires sent to them. They are

men who, with few exceptions, began their careers during the first two decades of this century (Smith, T. C. 1960:93).

Of the 154 presidents, 70 (45 percent) indicated that their fathers were "farmers." However, half of these were landlords who did not cultivate their land, and another 18 percent were cultivating landlords. It is clear that the farm sons who became presidents came largely from the upper stratum of the farm population. The proportion of landlords' sons in Smith's sample is approximately five times that of landlords' sons in the total population in 1920. Part of the reason for this high proportion may be inferred from the group characteristics of farm sons in the business elite. Only two characteristics are clearly discernible in their biographical notices in standard reference works--they are exceedingly well educated and they are preponderantly younger sons (Smith, T. C. 1960:97).

Farm sons were as well educated as nonfarm sons in the business elite, and both had better education in general than the rest of their generation (Smith, T. C. 1960:99). As Smith observed, most farm sons in the business elite were younger sons: 68 percent, as compared to 26 percent who were eldest sons and 6 percent whose birth order was not recorded in the biographical sources. This reflects the general pattern in farm families--

especially in the landowning families--wherein the eldest son inherits the headship of the family, the bulk of the family property, and the father's occupation. It is surprising that despite this so many eldest sons of farmers managed to have business careers. Nevertheless, it is obvious that the probability of a business career was less likely for an eldest son than for a younger son (Smith, T. C. 1960:101).

A second study to be considered is one by Abegglen and others which is based on questionnaire responses of 396 of 695 men selected as comprising the topmost stratum of Japan's present-day political, intellectual, and business hierarchies (Abegglen et al. 1960:110). As in the preceding paragraphs, we will focus this discussion upon business leaders.

Abegglen notes that a rather small proportion of the business leaders in the study (24 percent) had farm backgrounds. Over two-thirds of these were landlords, and about half of these landlords had a second occupation, such as local government official or factory or shop owner, which brought them into contact with the larger political community or involved an element of business activity (Abegglen et al. 1960:115).

However, a number of the small-business backgrounds of respondents appear to have been essentially rural. Of those

business leaders who indicated that their fathers were owners of small businesses (19 percent), one-third also stated that the business was in a rural area, or that the father was a farmer, in addition to being a businessman. In all, a total of one-third of the 207 business leaders were essentially from rural backgrounds (Abegglen et al. 1960:115).

In discussing the birth-order characteristic of leaders, Abegglen notes that the proportion of eldest to younger sons is highest in business leadership, where they comprise 51 percent of the total. However, he does not indicate what proportion of business leaders of rural origin was composed of eldest sons. Since in the total sample approximately 38 percent (Abegglen et al. 1960:123) of the sons of farmers are eldest sons, it appears probable that there is a somewhat smaller proportion of eldest sons among business leaders of rural background than among business leaders of urban background. In further support of this inference, one-third of the fathers of business leaders were executives or owners of large businesses, which would be found primarily in urban areas, and approximately 60 percent of the leaders in the total sample from such backgrounds were eldest sons (Abegglen et al. 1960:112, 123).

The Smith and Abegglen studies suggest that being a younger son is more likely to lead to effective successful participation in Japanese industrial life than being a first-born son. This appears to be truer for youths with farm backgrounds than for those with nonfarm backgrounds, which is what might be expected, first-born sons of farmers having generally more incentive (by way of inherited privilege) to stay at home and take over the family farm, and thus less reason to be tempted by a business or industrial career.

Namiki (1960) has commented on the current employment of farmers' sons in the labor force. He notes that before World War II many farmers, especially those with large holdings, often kept their younger sons at home to work on the farm for a number of years after they completed their schooling. This is not so often the case now; the proportion of younger sons who go on to high school has increased greatly, and both high school and middle school graduates tend to seek employment immediately after graduation. In part this practice is a result of the definite preference of industrial employers for recent graduates (Abegglen 1958:36; Namiki 1960:36-37). Often eldest sons will commute to a nonagricultural job for a number of years and then return to agricultural work (Namiki 1960:36).

The movement of younger sons to urban areas has meant, especially in the case of farm families, a broadening of the base of economic security for the family, and has improved the welfare of the eldest son and heir (Taeuber 1958:55). The siphoning off of younger sons from the rural areas has added to the stability of the rural villages by removing from the village population the youths who are less likely to adhere to traditional orientations (Abegglen 1957:188-89).

Ronald Dore (1959) has given consideration to the movement of rural males into the nonagricultural labor force. He believes that the important limiting factor in this movement is whether or not there are jobs for these males to move into, and that it is individuals rather than families who are significantly involved in the migration out of rural areas.

Generally speaking, given a fixed number of job opportunities, unattached younger sons have priority in filling them, rather than heads of households with wives and families. They have fewer ties in the village, the expulsive forces driving them to seek a job outside agriculture are greater, and being younger and unattached they are better able to accept apprenticeships and the unskilled low-wage jobs in small and medium factories and shops for which the opportunities are greatest. [Dore 1959:264]

The predominant part played by younger sons in rural out-migration is related to the persistence of primogeniture in rural Japan. The laws governing inheritance have been changed since

the war; the new Civil Code of 1948 replaced the old system of primogeniture by stipulating equal inheritance for all children of either sex, with a portion reserved for a surviving spouse. In practice the legal change seems to have made little difference. It simply is not possible to divide the small landholdings of the average Japanese farmer. Dore (1959) reports that a survey in 1951 of some 250 cases of inheritance found only 4 cases of equal inheritance, and 42 cases in which children other than the main heir were given substantial minor portions. The usual practice, he says, is that all the children except the eldest son renounce their right to inherit by legal process or simply by default. By tradition, the younger children were compensated by a trousseau for a daughter on marriage, payment for the education of a younger son, or help to build him a house when needed, rather than at the time of the father's death. In general the law has meant no change in the pattern of single-son inheritance, though it may have weakened the automatic precedence of the eldest son and increased the proportion of cases in which younger sons inherit instead. No matter what changes have taken place, each farm family is faced with the problem of providing in some manner for all but one son in each generation, and it is these predominantly younger sons

who are likely to have first priority in claiming whatever jobs are available (Dore 1959:264-65).

The statistics showing a big outflow of adolescents from farm families into nonagricultural occupations have been used as a basis for demonstrating that this outflow has been sufficiently large in recent years to indicate that not only younger sons, but also a fair proportion of eldest sons, are leaving agriculture. This could be a repetition of the prewar pattern in which families moved out of agriculture after one person, usually the eldest son, had preceded them and established himself in some other occupation (Dore 1959:265).

Dore feels that if the future number of job opportunities falls below the number of job-seekers, these younger sons of farmers will probably find more difficulty in securing jobs. Even now the children reared in towns are relatively better educated and have the advantage of being on hand for the jobs which rural youths must come to the city to find (Dore 1959:266-67), and in recent years many younger sons have found work in an urban area more because a job was created for them than because the job was available. In these cases relatives or teachers use their influence to persuade employers to employ youths in return for their room and board and a small amount of expense money. Once the

youth has thus secured a footing in an urban area, he may be able to move on (Dore 1959:267).

Not all younger sons of farmers leave the farm when they finish their compulsory schooling. Many of them currently form a hard core of underemployed rural workers on Japanese farms. When the eldest brother marries, he may place his younger brother with a childless farmer looking for an heir to adopt, but if this is not possible the youth finds himself in his twenties, seeking a non-agricultural job for which he has not developed the necessary skills. His position is more difficult because employers would not consider him suitable at his age for the apprenticeships usually given youths who have just finished their compulsory schooling (Dore 1959:268).

The authors of Village Japan (Beardsley et al. 1959) discuss the relative positions of first-born and non-first-born sons in rural Japan. They note that as the eldest son approaches adolescence he begins to feel the pressure of his future responsibilities. If he is from a farm household, his parents want him to know farming well and expect him to spend more time helping his father. He may go to high school and then on to farm school before settling down on the farm, or he may commute to a job outside the community temporarily (Beardsley et al. 1959:312).

A younger son, once his schooling is finished, is expected to help the household either with fieldwork at home or money earned through a nonagricultural job. Eventually his relation to his natal home will be severed through marriage-adoption into a household lacking a male heir, through a move to an independent existence in the city, or he may set up a separate household as a branch of his native household in his native community. The latter, however, is dependent upon circumstances of landholdings and finances and is a rarer possibility. In a fully developed household a second son almost invariably holds a nonagricultural job after finishing his education. This movement of younger sons into nonagricultural jobs, especially when they involve migration to urban areas, may strengthen the eldest son's position in the family, as younger sons no longer form a potential source of competition for him (Beardsley et al. 1959:180, 221).

Summary and Conclusion

In this section I have discussed a number of studies dealing with the relationship between order-of-birth differences in participation in the nonagricultural labor force by rural males. Through all of these studies there runs consistent emphasis on the greater pressures influencing a younger son to enter into

nonagricultural employment. Several of the studies indicate a greater tendency for the younger son to be more successful in this participation in the nonagricultural labor force.

There is some indication of an increasing tendency for first-born sons to participate, at least temporarily, in nonagricultural work. In such cases the nonagricultural work career of first-born males appears to be somewhat analogous to that of rural females. The first-born male works in the nonagricultural labor force for a few years and then leaves this work to return to agricultural pursuits; similarly, the rural female works for a few years in a nonagricultural job and then leaves it for marriage.

The traditional system of primogeniture exerts a persistent influence upon farm youth, so that more non-first-born sons than first-born sons are encouraged to leave the farm and enter the nonagricultural labor force. These non-first-born youths appear to be more effective in their participation in the industrial labor force and to exhibit a greater commitment to it. The studies discussed in this section have been concerned primarily with farm youth. It can be expected that the situation of nonfarm rural youth would be similar in those cases where shop, craft, skill, or position can be passed on from father to son.

Statement of Hypotheses

The preceding discussion of participation in the occupational subsystem formed by the industrial labor force suggests that the role of the male is more likely to require the acceptance of work-related values which are conducive to effective participation in industrial situations, than is that of the female. The discussion also suggests that the role of the non-first-born child, particularly if male, requires a greater acceptance of these values than does that of the first-born child.

Logically, the combined effects of these two characteristics which define a child's position in the rural family should predispose the child toward differential acceptance of these values. That is, we can predict that non-first-born youths will accept these values more readily than will first-born, and we can predict that males will accept them more readily than females. It follows that non-first-born males will accept them more readily than will others, and that first-born females will be less likely to accept them than will all others. This in effect yields the following order: (1) non-first-born males, (2) first-born males and non-first-born females, (3) first-born females. Therefore, for the purpose of this thesis I delineate three categories of respondents according

to their sex and birth-order characteristics and the hypothesized relation of these characteristics to the acceptance of work-related values. These categories are presented below, with a discussion of the relation of the characteristics to the acceptance of work-related values.

Category I

In this category I place non-first-born males. These respondents possess both of the characteristics which I posit as predisposing toward the acceptance of values conducive to effective participation in industrial work situations. Therefore, I anticipate that the responses of this group will show the greatest degree of acceptance of the values under consideration in this study.

Category II

In this category I place first-born males and non-first-born females. Each individual in this category possesses one of the characteristics which I believe tend to predispose respondents to accept the values being studied. Therefore, I anticipate that respondents in this category will, in their responses, indicate a degree of acceptance of these values which is somewhat less than that shown in the responses of the individuals in Category I.

Category III

In this category I place first-born females. Individuals in this category possess neither of the characteristics which I accept as predisposing respondents toward acceptance of the values being studied. Therefore, I anticipate that respondents in this category will show less acceptance of those values than respondents placed in Category I and Category II.

The first hypothesis

Hypothesis 1: When respondents are categorized by the sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate the greatest acceptance of work-related values, respondents in Category III will indicate the least acceptance of work-related values, and respondents in Category II will indicate a degree of acceptance intermediate to these two categories.

This hypothesis may be presented schematically as follows:

Category I > Category II > Category III

In terms of sex and birth-order characteristics these categories are operationally specified as indicated below.

Non-first-born males > First-born males and Non-first-born females > First-born females

The second hypothesis

One of the value areas with which I am concerned is particularly crucial for participation in the types of industrial situations described in the survey of literature. This is the area concerned with a respondent's orientation to physical mobility (Value Area III). Rural respondents who intend to participate in urban-industrial work situations must be willing to accept at least a partial disruption of their ties to kin and community, as this is an obviously necessary prerequisite to such participation. However, it must be recognized that there may be a variety of reasons for the respondent's willingness to disrupt these ties. For example (and these are only some of the more obvious reasons), a male may want to secure additional education at a high school or fishery or agricultural technical school, a female may find it necessary to marry outside her community, or an individual of either sex may simply feel a general dissatisfaction with rural life.

The part which this value may play in participation in urban industrial situations has been suggested by Abegglen in a study of the attitudes of Japanese industrial workers (Abegglen 1957):

In the individuals who migrate from a rural village the psychological prerequisite must be a capacity to maintain some measure of autonomous identity. In the relatively closely knit and well-defined system of relationships in the village, he is confronted with a limited range of personal decisions and choices in establishing his adult role. In a complex industrial and urban setting what he becomes is by virtue of the increased social differentiation and complexity of relationships more dependent on individual choice and decision. To be able to maintain himself in the city he must cut himself off, psychologically, from the more safe and less demanding village and develop a considerable capacity to maintain autonomy, to hold to behavior and attitudes different from and independent of those of his village. [Abegglen 1957:188]

This thesis is concerned with effective participation in industrial work situations. Therefore, I am particularly interested in determining which respondents indicate the greatest willingness to leave their rural environment and who also accept the other values presumed to be conducive to their effective participation in industry. These are the respondents who should become the most effective industrial workers. They will possess the necessary prerequisite to participation in industrial situations (willingness to disrupt ties to their rural environment) and will demonstrate acceptance of other values presumed to be conducive to effective participation in such situations.

In the formulation of the second hypothesis I utilize the same frame of reference employed in the formulation of Hypothesis 1. The characteristics which predispose respondents toward

a general acceptance of work-related values conducive to effective participation in industrial work situations should be manifested most clearly by the degree to which respondents associate them with willingness to leave the rural environment.

In other words, the concern of the second hypothesis is with the variation among the several categories of respondents in their association of willingness to leave their rural environment with the acceptance of other values which should predispose them toward effective participation in industrial work situations.

Hypothesis 2: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, the association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values will be closer for respondents in Category I than for any other category, in Category III respondents will indicate the least association between these values, and in Category II respondents will indicate an intermediate amount of association between these values.

The tests of Hypothesis 2 will be based upon the following two specific subhypotheses which are derived from this basic statement of Hypothesis II:

Subhypothesis 2a: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, a larger proportion of respondents in Category I than in any other category will indicate in their responses a positive association between willingness to disrupt their ties to their rural environment and the acceptance of other work-related

values, in Category III the smallest proportion of respondents will indicate association between these values, and in Category II an intermediate proportion of respondents will indicate association between these values.

Subhypothesis 2b: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate a greater degree of association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values than those in any other category, respondents in Category III will indicate the least degree of association between these values, and respondents in Category II will indicate an intermediate degree of association between these values.

CHAPTER II

THE STUDY OF ORIENTATIONS TO VALUES IN RURAL JAPAN: A SURVEY OF LITERATURE

Introduction

There appear to have been no systematic studies of work-related values among rural Japanese, although a number of studies of rural Japan have been concerned to some extent with the study of such values. In this chapter I shall examine these studies to determine if this previous research provides evidence to support or contradict the hypothesized relationship between sex and birth-order characteristics and work-related values and to determine the areas in which this previous research appears inadequate for dealing with the problem which is the focus of this thesis.

The people of rural Japan are not "peasants" as the term is defined by most modern anthropologists. They are not, for the most part, isolated from the larger society, and the modern marketplace has an immediate effect upon their lives and economy. They are the products of a unified national school system which

achieves a high rate of compulsory school completion in rural areas, and are thus enabled to engage in extensive reading of newspapers and magazines. They have a high ratio of radio ownership and listen to broadcasts often. They may regularly visit cities, often for business associated with farming, which is primarily a profit-seeking and not a subsistence operation (Ward 1960:140; Taeuber 1958:283). They are farmers in a reasonably modern sense of the term, though in some areas of their lives attitudes and behavior patterns which can be regarded as premodern or traditional may survive. Though they are a rural people who cannot be considered the polar opposites of some hypothetical urban type, it does appear that the process of change accompanying the industrialization of Japan has shown itself in a slower and more piecemeal fashion in rural areas than in the large cities (Ward 1960:140).

Studies of Rural Japan

Japanese value orientations and culture change

This process of change is a topic of concern to Caudill and Scarr (1962) in their study, "Japanese Value Orientations and Culture Change." The research upon which they base their study was carried out in Japan in 1955. Samples were drawn from a

small city, a medium-sized city, and a ward area of Tokyo, amounting to a total of 619 respondents, including senior high school students and their parents. The sample from the small city included respondents from surrounding rural areas. For making comparisons of value orientations according to place of residence, the small city was considered more representative of a folk way of life, the medium-sized city and Tokyo as more representative of urban living patterns (Caudill and Scarr 1962:63-64).

Caudill and Scarr utilize Kluckhohn's notion of ordered variation in value orientations for the understanding of a culture. Value orientations are defined as follows:

Value orientations are complex but definitely patterned (rank-ordered) principles, resulting from the transactional interplay of three analytically distinguishable elements of the evaluative process--the cognitive, the affective, and the directive elements--which give order and direction to the ever-flowing stream of human acts and thoughts as these relate to the solution of "common human problems." [Caudill and Scarr 1962:55]

Kluckhohn (1961) assumes the existence of a number of common human problems for which all people must find solutions, and a limited range of variability in the solutions to these problems. There are varying degrees of emphasis placed upon the different solutions, with the result that in every society there

will be a dominant value orientation and one or more variant value orientations for each problem (Caudill and Scarr 1962:55).

The Caudill and Scarr study is concerned with three of the common human problems postulated by Kluckhohn: man's relationship to his fellow man, man's place in the flow of time, and man's relation to nature and supernature. The value-orientation areas corresponding to these problems and investigated by Caudill and Scarr are the relational area, the time area, and the man-nature area (Caudill and Scarr 1962:55-56).

Kluckhohn postulates that in each area there are three solutions to each of the common human problems and that, although all solutions are always present, the order in which they are emphasized may vary. Caudill and Scarr designate each of the three solutions to a common problem as a position in a value-orientation area (Caudill and Scarr 1962:56).

For the purposes of the present study the responses of Caudill and Scarr's young rural respondents to items concerning the various value-orientation areas will be examined. Differences among this category of respondents were not specifically analyzed in the Caudill and Scarr study, and therefore their responses are included in the following discussion. The first to be considered is the time value-orientation area.

The items used for analysis of this orientation are given below.

Expectations About Change

Three young people were talking about what they thought their families would have one day as compared with their fathers and mothers. They each said different things.

(Fut) The first said: I expect my family to be better off in the future than the family of my father and mother or relatives if we work hard and plan right. The harder we work, the better things get in this country.

(Pres) The second said: I don't know whether my family will be better off, the same, or worse off than the family of my father and mother or relatives. Things always go up and down even if people do work hard. So one can never really tell how their life will be.

(Past) The third said: I expect my family to be about the same as the family of my father and mother or relatives. The best way is to work hard and try to keep up things as they have been in the past.

Within the framework of the present study, these items have implications for value orientations which may be of even greater significance than the postulated time orientations. The content of the items has obvious implications for orientations to: hard work, internal or self-determination of events, optimism, and change.

An analysis of the orientations of the young rural respondents, those most similar to the respondents utilized in the present study, reveals some interesting differences in orientations. In Table 3 there are two general differences between male and female responses. Males show a greater tendency to endorse those orientations which place primary emphasis upon the future position,

TABLE 3.--Young rural respondents' orientations to time.^a

Rankings	Male	Female	Total
1. Future-present-past	32	14	46
2. Future-past-present	40	25	65
3. Past-future-present	0	14	14
4. Past-present-future	0	16	16
5. Present-past-future	20	18	38
6. Present-future-past	8	11	19

^aFrom Caudill and Scarr 1962:75.

while females tend to endorse those placing a primary emphasis upon the past. According to my reinterpretation of the time-orientation items, this suggests that males have a stronger belief in their ability to bring about change, in terms of social and economic achievements, through hard work and planning. The obverse, lack of such belief, is of course revealed in the females' emphasis upon the past position.

Several other items which show notable differences between young male and female rural respondents are in the area of relational value orientations. The first of these, which has to do with help in the case of misfortune, follows.

Help in Case of Misfortune

A man had a crop failure, or, let us say, had lost most of his cattle. He and his family had to have help from someone if they were going to get through the winter. There are different ways of getting help, as in the following.

1. Would it be best if he depended on his brothers and sisters or other relatives all to help him out as much as each one could?
2. Would it be best for him to try to raise the money on his own, without depending on anybody?
3. Would it be best for him to go to a boss or to his head house (honke), and ask for help until things got better?

[Caudill 1962:2]

The responses of young rural respondents to this item are given in Table 4. From this table it can be seen that males show a greater tendency to endorse orientations which place a primary emphasis upon an individualistic position while females endorse

TABLE 4.--Young rural respondents' relational value orientations.^a

Ranking of Value-Orientation Positions		Male	Female	Total
1.	2-1-3	56	27	83
2.	2-3-1	8	11	19
3.	3-2-1	8	7	15
4.	3-1-2	0	7	7
5.	1-3-2	8	25	33
6.	1-2-3	20	20	40
Incomplete rankings		0	2	2

^aFrom Caudill and Scarr 1962:78.

those which place a primary emphasis upon the cooperative position.

The last item of interest also concerns relational value orientations--specifically, work relationships:

Wage Work

There are three ways in which men who do not themselves hire others may work.

1. One way is working in a group of men where all the men work together without there being one main boss, every man has something to say in the decisions that are made, and all the men can depend on each other.
2. One way is working on one's own as an individual. In this case a man is pretty much his own boss. He decides most things himself, and how he gets along is his own business. He only has to take care of himself and he doesn't depend upon somebody else.
3. One way is to work for a big boss who has been managing things for a long time. In this case, the men do not take part in deciding matters, but they know they can depend on the boss to help them out.

[Caudill 1962:4]

The responses of young rural respondents to this item are shown in Table 5. The pattern of responses found in Table 4 is even more pronounced in Table 5. Males show a greater tendency to endorse the second orientation, which places a primary emphasis upon an individualistic position, while females show a greater tendency to endorse the orientations which emphasize a cooperative position. Here again the male respondents show a greater tendency toward an individualistic orientation. The content of items used to indicate an individualistic position or orientation is

TABLE 5.--Young rural respondents' relational value orientations.^a

Ranking of Value-Orientation Positions		Male	Female	Total
1.	2-1-3	32	5	37
2.	2-3-1	0	0	0
3.	3-2-1	0	0	0
4.	3-1-2	0	0	0
5.	1-3-2	0	7	7
6.	1-2-3	68	86	154
Incomplete rankings		0	2	2

^aFrom Caudill and Scarr 1962:78.

suggestive of what has been called in this study the self-determination of events.

Summary and discussion.--In terms of the value areas used in this study, the Caudill and Scarr results suggest that young rural Japanese males, compared with rural females, have a more positive orientation to the self-determination of events, to hard work, to planning or structuring of activities, and to change.

There are several limitations to applying the results of the Caudill study to the problems with which we are concerned:

1. The "rural" sample used by Caudill and Scarr includes a number of urban respondents from a city of over 55,000 population.
2. The respondents are high school seniors and, therefore, a rather select category of young Japanese.
3. The authors have not controlled for the possible effects of order of birth.
4. The study was not designed to investigate the values which are of concern to this study, though Caudill has concurred in the reinterpretation of items suggested above.¹

¹Letter from William Caudill, Laboratory of Socio-environmental Studies, National Institute of Mental Health, U.S. Department of Health, Education, and Welfare, Bethesda, Maryland.

A study of village Japan

Beardsley et al. (1959) provide considerable information on the orientations of inhabitants of the farming village of Niiike, the site of their study, which is partly derived from data gained through the use of psychological projective tests. Much of their information is in the form of generalizations about orientations of village inhabitants. In some cases there is reference to the characteristics of persons to whom these generalizations apply, and it is these cases which are of primary concern to this study.

Niiike's inhabitants place considerable emphasis upon the value of hard work. They are inclined to view work as a positive opportunity to achieve success rather than as a burden imposed by circumstance or by someone in higher authority. They have great confidence that effort will bring achievement, though recognizing that circumstances may intervene to prevent it. For instance, they know that family obligations may prevent a person achieving his goal, or that the cultural definition of the female sex role may be a deterrent to a female's achievement of goals (Beardsley et al. 1959: 69-70).

Ambition is highly valued in Niiike. Regardless of age or sex the people of the village approve of self-betterment. The drive to accomplish things, to work hard for distant goals, is

deeply implanted and strong. This ambition is made compatible with ideals of family unity by being identified with the household (Beardsley et al. 1959: 480).

In discussing achievement, the people of Niiike often tacitly assume that success must be sought away from the home and family. However, their responses do not suggest that leaving the home, of itself, breaks the family tie. The person who has left home is conceived to be making his effort for the family's sake. Even a refusal to return home when asked is not necessarily considered an unwillingness to honor family obligations, but can be thought a proper assertion of the member's ambition for the well-being of his family. Thus the emphasis on family obligation does not in this case necessarily preclude goal achievement nor, for a woman, do the duties of motherhood: a mother's goals can be achieved vicariously through her children as she stimulates their ambition and removes obstacles to their progress (Beardsley et al. 1959: 69-71).

In Niiike certain virtues of collectivity are highly valued. However, such orientations are emphasized more in regard to the family than the community. The authors note that:

However much it is tied to the community socially, each household has been basically an independent economic unit for some time. Ways of creating income other than through rice

growing are vital to the full realization of independence, provided they do not depend on irrigation or similar communal activities. In Niiike, these activities include growing mat rush for sale on a highly competitive market, growing market vegetables and fruit, producing eggs and other minor market products, weaving tatami covers for sale, and working at salaried jobs. It is quite clear that this cluster of activities interferes with subordination of households to the interest of the community as a whole. People hesitate to use co-operative help particularly in the heavy work connected with mat rush. They pay wages instead, lest the consequent moral commitments hamper their freedom to sell the crop on an entrepreneurial basis, seeking the best time and place to market it. Mat rush, above all, is cultivated in the context of an economy of profit and loss rather than an economy of communality and sharing. [Beardsley et al. 1959:478]

This seeming contradiction of emphasis on collectivity orientations at the family level on the one hand, and emphasis on individual household effort on the community level, has a parallel in the relation between tradition and change described by the authors:

Niiike up to the end of our period of study in 1954 typified the majority of Japanese rural villages. If one were to select a single outstanding feature by which to characterize Japanese rural communities after eight decades of massive, rapid revolution in the nation as a whole, this feature would be their capacity to maintain equilibrium, while absorbing fundamental change. Whoever comes to know these villages intimately perceives through all of his senses the serene self-respect and regard for tradition maintained by its people even at the precise moment they are committing the village and themselves to fundamental innovation. [Beardsley et al. 1959:480]

In their discussion of the formation of values Beardsley et al. (1959) treat birth-order distinctions as one of a number of

factors influencing the socialization and social position of rural youths. They note that in contrast to the "teen-age" period found in the United States, the years between twelve and eighteen tend to be divided, with the first half belonging to childhood and the latter half to adult life. Within a year after they reach fifteen, youths are numbered among the young adults and carry on essentially adult activities (Beardsley et al. 1959:310). Since fifteen is also the usual age of graduation from junior high school, for many it is the age of entry into the adult occupational world.

In many respects the step from childhood to adulthood is simplified by the small number of alternatives open to adolescents in basic life decisions. Tradition presents a fairly standard set of guide lines for behavior appropriate to such common roles as farmer, parent, and neighbor, in which unanticipated situations are relatively infrequent (Beardsley et al. 1959:309-10). The youth who migrates to the city has a greater likelihood of encountering unanticipated situations, though even in his case relatives and friends of relatives often make his adjustment easier.

The authors of Village Japan note that education is one area of importance in the life of rural youths that has changed in the postwar period. There has been a definite increase in the proportion of rural children who go on to high school, and

throughout Japan, even in isolated rural areas, there is a strong positive interest in school. In addition to the traditional respect for learning and the view of school as an avenue for bettering oneself and one's family, the school often offers a child for the first time in his life associations with others who are neither kindred nor close neighbors. Thus the school environment may prove to be an entirely novel and exhilarating social situation for him (Beardsley et al. 1959:302, 307). The importance of school for the present study has been discussed in a previous section dealing with the relationship between moral education courses and the study's selected value areas.

The importance of age and order of birth for rural young people, especially males, is emphasized by Beardsley. The importance of these distinctions in ordinary life is demonstrated by the common, everyday terms expressing age differences that are a part of the general vocabulary. The age distinction built into the language reflects actual behavior discrimination. Siblings have differential rights to inheritance and other privileges, the eldest being favored over his juniors, and from the time they first begin to speak brothers and sisters are so conditioned by the everyday kinship terms that when they receive unequal treatment they are not likely to question it (Beardsley et al. 1959:244).

The rule of primogeniture which is the ideal or norm of inheritance makes sisters and younger brothers dependent on the first son for their own future, if it is not settled during their father's life. Even though they may leave the household, they generally need family assistance to get properly married or establish themselves elsewhere (Beardsley et al. 1959:236-37).

The position of eldest son carries with it the loyal affection of the household and prestige among outsiders. It carries with it also a responsibility which functions as a curb to his prerogatives. Of all the sons he is the one most apt to have ties of warmth to his father, as well as a sense of security within the household. This security, at times, makes him relatively placid and unaggressive in comparison to his younger brothers (Beardsley et al. 1959:221).

These authors state that the position of the daughter in the rural Japanese family is roughly uniform, regardless of elder or younger status. A daughter has no permanent place in the home into which she is born, and there is little chance that she will continue life in her native village. Eventually she marries elsewhere. If her household lacks male heirs, one daughter may stay home to become the wife of the man the household adopts to be its heir. She may, prior to marriage, either work at home or work

outside of the household for wages for several years (Beardsley et al. 1959:219, 221-22).

Summary and discussion.--The information concerning orientation to values which is presented in Village Japan is primarily in the form of generalizations suggesting some of the results which may be expected from the type of survey research which is utilized in this study.

Beardsley et al. indicate that ambition, self-betterment, achievement, and hard work are highly (positively) valued by all inhabitants of Niiike. This suggests that most rural Japanese would likewise be positively oriented toward self-determination of events, and that there may be little difference among respondents in terms of orientation to this particular value.

There is an indication that the people of this village of Niiike often believe that to be successful one must leave the village. This appears to be particularly true for males, since the authors observe that a female who is positively oriented toward achievement may gain it vicariously through her children. This suggests that among rural respondents, especially males, a positive orientation to occupational and economic advancement may be associated with a positive orientation to physical mobility. The

authors further indicate that it is these youths who are most likely to encounter new experiences.

The authors' discussion of economic activities in the village suggests a positive orientation toward working for an extrinsic monetary reward. This orientation is reflected not only in their own profit-oriented work, but in their use of wages rather than "exchange labor" to secure the work of others. There is no indication, however, of how such an orientation might vary among different categories of villagers.

Beardsley et al. suggest that the villagers' orientation to change contains both an acceptance of change and a preservation of tradition. This position appears to be somewhat ambivalent, although it probably implies an acceptance of change in some areas like technological innovation, alongside a preservation of tradition in others areas such as social organization.

Beardsley et al. suggest that among rural Japanese education has a strong positive value. They further indicate that this is associated with a positive orientation to achievement. Thus it would be expected that a high proportion of all rural Japanese have a positive orientation toward education, and that in this study young rural Japanese who are more positively oriented to physical

mobility and self-determination of events would also be more positively oriented to education.

In discussing birth-order differences the authors place primary emphasis upon the importance of birth order for the male child. However, they note that if a household lacks male heirs a daughter may stay at home to become the wife of the man the household adopts as its heir. This suggests a possibility that the position of a first-born female child may differ somewhat from that of a daughter who has older sisters.

Value attitudes of women in two Japanese villages

A somewhat different approach to rural orientations is taken by DeVos and Wagatsuma (1961). Their study, which was conducted in two somewhat different villages, focuses upon women's attitudes toward role behavior. In their introduction they note that changes in relationships between the sexes are evident mainly in the urban areas of Japan, and that while such changes are becoming increasingly evident in rural areas, rural life tends to remain more conservative. They suggest that one explanation for this relative conservatism may result from rural out-migration--those most interested in changing their ways migrate to urban centers, leaving in the home community those most likely

to maintain some semblance of conservative economic and social stability (DeVos and Wagatsuma 1961:1206).

Implicit in this theory is the assumption that rural villages have among their population a certain number oriented positively to change and physical mobility, and that such orientations are generally found among those who have not as yet completed their compulsory schooling.

The two villages they chose for their study are Niiike, the farm village studied by Beardsley et al. (1959), and Sakunoshima, a fishing village. Data from observations and from projective tests are used to show the general differences between these two villages. In the farming community of Niiike there is a greater stress upon traditional hierarchical family relationships, including emphasis upon the subordinate position of women. The fishing community of Sakunoshima reveals much less concern with traditional attitudes in family relationships (DeVos and Wagatsuma 1961:1207-8).

The differential effect of community attitudes upon the young of different sexes during their process of socialization is outlined by the authors in their discussion of the traditional pattern.

In the traditional pattern, parental pressure, expectation or control, is exerted more strongly on a son than on a daughter because important social status and roles were usually limited to men and much more social responsibility was required of them than of women. One may also point out that when children act against parental expectation, it is more often their mother than their father who is exposed to a strong sense of failure. The mother coming in as an outsider into the family has to demonstrate her capacity by being very responsible for the correct upbringing of her children. [DeVos and Wagatsuma 1961:1219]

Since tradition places the woman's status lower than the man's, and the woman's self-assertion is severely circumscribed, her son commonly becomes for her a means of self-realization (DeVos and Wagatsuma 1961:1223).

Summary and discussion.--The DeVos and Wagatsuma study indicates a persistence of male-female differences in rural areas of Japan, with an implication that the persistence of conservative orientations in rural areas is related to out-migration. The authors suggest that those persons who are positively oriented to physical mobility are also positively oriented to change. They also present the proposition that achievement-oriented women attain their goals vicariously through their children rather than through personal accomplishment, which suggests that among females the association between orientation to physical mobility and

self-determination of events need not be as marked as it is in the case of males.

DeVos and Wagatsuma do not deal specifically with the problem of differences in industrial value orientations among young rural Japanese, nor do they discuss the possible relationship between such orientations and differences in birth order.

A study of city life in Japan

Both rural and urban family situations have been described by Ronald P. Dore in his book City Life in Japan. Dore (1958) discusses the problem of hierarchical relationships in rural areas, both within and between rural families. He feels that Western egalitarian ideas have weakened the force of traditional birth-order distinctions, even in rural areas, and says that most rural mothers will now deny to interviewers that they give any special attention to their eldest sons, although in rural areas the functional importance of the eldest son's pre-eminence is little changed. He expresses his general view on the changing attitude toward the first son as follows:

. . . We can perhaps see here, at least, an instance where the influence of ideas in altering the pattern of social relations has been of greater importance than the influence of economic changes, though even here we cannot ignore the possible reinforcing effects of tendencies towards "universalistic" and "achievementistic" criteria in other spheres

of society--birth order has had little effect on the private's becoming a corporal, the schoolboy's chance of getting through the middle-school entrance examination or the reporter's chance of becoming assistant editor. [Dore 1958:152]

The position of the first son is affected by the relative position of main and branch families. Dore reports that the status superiority of the main family, which is an integral part of the traditional pattern of main-branch family relations, is not now universally accepted. If the branch family is located in an urban area and the main family in a rural area, the degree of the branch family's economic security may affect its willingness to ascribe higher status to the main family. The strong tendency of the branch to defer to the main family represents a continuation of the attitudes toward father and elder brother which have been instilled since childhood, and is often supported by the branch family's recognition that in economic necessity it can turn to the main family for help and shelter. This can be a source of psychological security for the branch family (Dore 1958:150-51).

Changes in occupational structure affect the relationship between main and branch family, and between father and eldest son. As long as the family is the unit of production, the "family occupation" tends to remain unchanged through the generations. This provides a strong bond between father and eldest son and

serves to foster the sense of the household as an entity continuing through the generations. It also provides a strong reason for the son to accept the authority of his father; rebellion would leave him little prospect of a livelihood outside the family occupation. In wage and salary workers' families, however, occupation is divorced from the family and becomes the occupation of an individual. Preserving the ancestors' business, land, or craft ceases to be a reason for the eldest son to follow in his father's footsteps. As the number of occupations increases, old concepts of fixed status and social barriers tend to be replaced by a picture of society as more open and composed of a large number of occupational groups ranged along a continuum of monetary reward and social prestige. Individuals move up the scale through skill, initiative, or good fortune, and education may make it possible for children to enter the occupational hierarchy at a higher level than that of their parents. In this case the ideal of succeeding the father is replaced by the ideal of surpassing him (Dore 1958:113).

Summary and discussion.--Dore suggests a change in the direction of a weakening of traditional birth-order distinctions in the Japanese family. However, at the same time he indicates that it is in rural areas that the functional importance of such

distinctions tends to be maintained. He indicates that in rural areas, where there is a smaller proportion of wage and salary workers, first-born sons are less likely to participate in the industrial labor force and therefore less likely to be positively oriented to physical mobility. He makes no suggestions as to possible differences in orientations associated with birth-order distinctions among rural female Japanese.

A study of postwar youth in Japan

Although the study by Beardsley et al. and the other studies discussed so far have to a certain extent been concerned with Japanese youth, this has not been their major emphasis. A study which does focus primarily upon young people is Without the Chrysanthemum and the Sword: A Study of the Attitudes of Youth in Post-War Japan (Stoetzel 1955). In an appendix to this book the author includes a questionnaire used by the National Public Opinion Research Institute of Japan in March-April, 1952, to interview 2,671 persons selected throughout the country on a representative basis. From the responses to this questionnaire, those of the two hundred rural respondents in the sixteen-to-nineteen age group (the youngest age group in the survey) have been selected for discussion here. These represent the combined responses of males

and females, for though the total sample is 51 percent male and 49 percent female, the proportion of males to females in the age sixteen to nineteen rural category is not given. In addition to this survey, Stoetzel presents the results of a more limited survey conducted in rural areas in 1951. For the purpose of this study, the results of the smaller survey will be discussed in relation to the findings of the larger.

The first question considered may be interpreted as an indication of the degree of optimism exhibited by rural young people: "Do you think that living conditions in the world will become progressively better?" (Stoetzel 1955:241). The responses, listed in Table 6, do not suggest a high degree of optimism, though those who expect world living conditions to become better form the largest single category of responses.

The next question--"Which of the following comes nearest to being your goal in life?" (Stoetzel 1955:252)--is concerned with goals desired by respondents. The choices given as alternative responses to the question are such as to indicate the degree and nature of the respondents' orientation to achievement. The choices and responses are presented in Table 7. The two largest categories of responses, those to questions 2 and 5, tend to emphasize achievement through one's own effort and suggest a

TABLE 6.--Expectations concerning prospective world living conditions among Japanese rural youth.^a

Responses	Frequency (percent)
Better	49
No change	21
Worse	16
Don't know	15

^aFrom Stoetzel 1955:241.

TABLE 7.--Life goals of Japanese rural youth.^a

Responses	Frequency (percent)
1. To devote yourself to the service of the public without thought for your own affairs	2
2. To achieve financial security through your own work	24
3. To become wealthy by devoting every ounce of energy to your work	4
4. To live light-heartedly for the day, with no thought for the future	6
5. To achieve fame by your work and learning	30
6. To live an honest life regardless of what other people do	20
7. To live the life you like without worrying about money or fame	14

^aFrom Stoetzel 1955:252.

belief in self-determination of one's future. The next two largest response categories, to questions 6 and 7, lack this emphasis on achievement. This suggests that, while the dominant orientation of this age group is toward achievement through one's own effort, a secondary orientation which lacks this emphasis characterizes a large proportion of rural youths.

The third question discussed is addressed even more specifically to the problem of achievement; it is in two parts: "Is there any particular thing you hope to achieve during your lifetime? If so, what kind of thing?" (Stoetzel 1955:254). Those who answered yes to the first part are asked a more specific question on the nature of what they hope to achieve. The percentage distribution of responses to this more specific question are given in Table 8. They are categorized by Stoetzel according to the nature of the desired achievement.

Category 7, technical skill and craftsmanship, forms the largest single group of responses. This, combined with category 8, occupation, places approximately one-third of the responses in the area of occupation as the goal of achievement orientation. The other numerically prominent categories are: category 3, houses and other forms of real estate; category 11, education and learning; and category 6, the home, filial piety.

TABLE 8.--Lifetime achievements desired by Japanese rural youth.^a

Responses	Frequency (percent)
1. Social contributions	7.6
2. Money	5.7
3. Houses and other forms of real estate	15.2
4. Bringing up children	7.6
5. Marriage	0.0
6. The home, filial piety	11.4
7. Technical skill, craftsmanship	18.1
8. Occupation	14.2
9. Social position	2.8
10. Relations with others	0.0
11. Education, learning	15.2
12. Ideas	0.0
13. Inventions, discoveries	0.0
14. Hobbies, amusements	4.7
15. Self-improvement	1.9
16. Religion	0.0
17. Political	0.9
18. Others	0.0
19. Don't know	5.7

^aFrom Stoetzel 1955:254.

The first of these, category 3, evidently reflects the characteristic rural emphasis on house and land; the second reflects the traditional cultural emphasis upon learning and may be related to the desire for occupational achievement; the third indicates a rural emphasis upon traditional family values.

Together these responses suggest the high importance of occupational achievement to rural youths. If the three related categories of occupation, skill and craftsmanship, and education and learning (all of which are conducive to success in the industrial world) are combined, they account for nearly one-half of the responses. The two categories of house and land and home and filial piety, if combined, account for somewhat more than one-quarter of the responses. Thus, these two groups of categories make up about three-fourths of the responses, which suggests that they are the major areas of achievement orientation for young rural Japanese. The group emphasizing occupation and education may indicate a category of respondents with a more urban industrial orientation, while the emphasis on house, land, and family may indicate a category of respondents who have the more rural, traditional orientation toward achievement.

The fourth and fifth questions to be considered have to do with the position of the eldest son in the Japanese family. The

fourth question deals with his inheritance rights, and the fifth with the treatment to be accorded him. Responses to the fourth question--"Do you think it better that the eldest son should inherit the house as was formerly the case?" (Stoetzel 1955:255)--are given in Table 9. In Table 10 are presented the responses to the fifth question: "Do you think it better to concede a special position to the eldest son and not to treat him exactly like his brothers?" (Stoetzel 1955:255).

The responses to these questions suggest that a majority of rural young people believe that the eldest son should continue to inherit the house. However, most of these respondents do not think it best to concede the eldest son a special position, which suggests that the current attitude toward the eldest son is not a simple, clear-cut acceptance of the traditional hierarchical position of the eldest son in the Japanese family. This may indicate a contemporary change in rural attitude toward the eldest son. It is possible that the response pattern represents a reconciliation of a desire for more equalitarian family relationships with a recognition of the necessity of primogeniture for maintaining the family house and land intact.

Further insight into relations within the rural family is provided by an examination of two tables contained in Without the

TABLE 9.--Responses of Japanese rural youth concerning the right of the eldest son to inherit the house.^a

Responses	Frequency (percent)
Yes	56
No	37
Don't know	7

^aFrom Stoetzel 1955: 255.

TABLE 10.--Responses of Japanese rural youth concerning the desirability of conceding a special position to the eldest son.^a

Responses	Frequency (percent)
Yes	37
No	55
Don't know	8

^aFrom Stoetzel 1955: 255.

Chrysanthemum and the Sword. They are based upon an unpublished report of a study, directed by Professor Yuzuru Okada of Tokyo Bunrika Daigaku (University), of the relations between parents and their children in rural areas in 1951. The respondents were fifty-three boys and forty-two girls in the Kwabe mura (village) secondary school (Nagano Prefecture) (Stoetzel 1955:78).

The question whose responses are given in Table 11 concerns services performed for boys and girls by other members of the family. This table lists these services and the person usually relied upon to perform them.

The second table (Table 12) likewise concerns relations within the family. This gives responses to a question dealing with disciplinary agents within the family and indicates who exercises the discipline. The table as given here is an adaptation of the table as presented by Stoetzel.

Stoetzel's interpretation of the responses given in Tables 11 and 12 provides some insight into the varying roles within the Japanese rural family. There is a definite indication that the treatment of the young varies by sex. In terms of physical well-being the boys are better cared for, and girls must rely more on themselves. For such services, children rely mainly on their mother or eldest sister. A definite difference by sex is seen in

TABLE 11.--Services performed for boys and girls by other members of the family (percent frequency).

Services	Family Member Performing Service ^a							
	N.O.	G.F.	G.M.	F.	M.	E.B.	E.S.	O.
<u>Boys</u>								
Sewing and laundry	0	0	2	0	77	0	17	2
Getting break-fast	19	0	0	0	63	0	16	2
Gifts of cakes . .	19	2	7	2	82	0	6	0
Pocket money . . .	19	2	0	60	34	0	2	0
Escort on visits	21	0	2	34	21	9	4	4
Help in school work	21	0	0	23	8	34	15	4
Approachability . .	21	2	0	26	68	2	2	0
<u>Girls</u>								
Sewing and laundry	31	0	0	0	57	0	12	0
Getting break-fast	33	0	5	0	52	0	10	0
Gifts of cakes . .	33	0	17	0	78	0	5	0
Pocket money . . .	33	2	2	77	19	0	0	0
Escort on visits	2	0	0	36	48	0	12	0
Help in school work	2	0	0	24	14	29	24	2
Approachability . .	2	0	7	29	62	0	0	0

^aKey: N.O. = No one; G.F. = Grandfather; G.M. = Grandmother; F. = Father; M. = Mother; E.B. = Elder Brother; E.S. = Elder Sister; O. = Others.

TABLE 12.--Administering of discipline within the family (percent frequency).^a

Person Administering Discipline	Type of Discipline	
	Praise	Rebukes
<u>Boys</u>		
Grandfather	6	6
Grandmother	4	8
Father	26	32
Mother	49	21
Eldest brother	9	23
Eldest sister	2	4
Others	2	0
<u>Girls</u>		
Grandfather	2	2
Grandmother	12	7
Father	24	36
Mother	57	17
Eldest brother	0	29
Eldest sister	5	7
Others	0	2

^aFrom Stoetzel 1955: 80.

terms of visiting. Twenty-one percent of the boys and only two percent of the girls pay visits unaccompanied. As for relying on others, the boys are escorted more by their fathers and brothers, and the girls by their sisters and mothers. Girls are helped more with their studies than are boys. Here the role of the elder brother is prominent, while that of the mother is less prominent than in any other area of assistance. In general the mother is regarded as the most accessible person; while the father is given as the second most accessible, he is far less so than the mother. The mother is considered far more accessible than the father, and this is more true for the boys than the girls (Stoetzel 1955:78-79).

Discipline within the family varies according to sex. Discipline is enforced mainly by the mother, the father, and the elder brother. The grandmother and the eldest sister play a somewhat larger part in the disciplining of the girls than of the boys. The mother's role demands that she praise more than rebuke, while the father's demands the opposite. The role of the eldest brother resembles the father's, in that he rebukes more than he praises.

In further discussion of the Okada data Stoetzel describes the preferential attachments among brothers and sisters in the rural families from which the respondents come and presents a

hypothesis concerning these relationships. His description and interpretation are given in the following quotation.

The pattern of preferential attachments to brothers and sisters is equally interesting and likewise raises questions which one would like to see more thoroughly explored. On the part of the boys the strongest attachment is to the eldest brother, with the eldest sister second, the younger brother third and the younger sister fourth; among the girls the first place goes to the eldest sister, the second to the younger brother, the third to the younger sister and the fourth to the eldest brother. The same dissymmetry that was shown in the children's attachments to their parents and grandparents is observable here. The places occupied by the eldest brother and the eldest sister in the affections of boys and girls respectively suggests an identification of the subject with the privileged child of his or her own sex; that the boys put the younger sister last shows the double effect of the social hierarchy of age and sex; and that the girls put the eldest brother last probably reflects a hostility reaction: here the situation is analogous to that of the grandparents in the affections of their grandchildren of the opposite sex. Perhaps the most interesting fact that emerges from these observations is the subjects' choice of the person holding second place in their affections--the elder sister in the case of the boys and the younger brother in the case of the girls. With all possible qualifications, one is tempted to advance the hypothesis that these reactions express on the part of the boys a need to be protected and on the part of the girls a need to protect. . . . [Stoetzel 1955:81]

Summary and discussion.--The youngest age category of rural Japanese interviewed for the larger survey is the sixteen-to-nineteen age category. This means that the sample is somewhat selective in its choice of young rural people, for it consists of those young people who are just beyond the age when

they should have completed their compulsory schooling. This indicates, of course, that the sample does not include those young people who completed their compulsory schooling and then moved away from rural areas to participate in the industrial labor force. In terms of sex and birth-order characteristics, the rural sample used in this survey may contain a larger proportion of first-born males than would be found in a younger age category.

The results of the larger survey suggest that approximately half of the respondents display a positive orientation to industrial values and that over one-quarter of the respondents are more positively oriented to traditional rural values. These differences may be associated with sex and order of birth differences among the respondents, but such differences can not be determined from the data provided by the authors.

The results of the survey of secondary school children indicate definite sex and birth-order differences among young rural Japanese. The differences indicated are not closely related to industrial value orientations, but do provide general support for the proposition that sex and birth-order differences are meaningful, and suggest that birth-order differences may be meaningful for females as well as for males. Again, these differences can not be related to the sex and birth-order characteristics of

the respondents themselves, since data necessary for such an analysis are not provided.

Summary

The studies discussed in this survey of literature are considered representative of the postwar English-language literature which is concerned directly or indirectly with the value orientations of young rural Japanese. None of these studies have been specifically concerned with the industrial value orientations of this category of Japanese. However, certain conclusions and generalizations found in these studies do provide some suggestion as to what can be expected from the analysis of the survey data secured for this study. A basic point which should be borne in mind is that most of these previous studies have not adequately controlled for the possible effect of sex and birth-order characteristics of respondents.

There is a definite indication of the existence of a birth-order effect among males, and possibly among females. The nature of such differences has been studied only among males. The clearest indications of the general effect of sex and birth-order differences which can be inferred from these studies are that males are more positively oriented to industrial values than

females, and that among males those who are non-first-born are more positively oriented to industrial values than first-born males. These inferences accord with the conclusions based upon the preceding discussion of differential participation in the Japanese labor force.

The next chapter will describe the procedures to be used in the analysis of data secured for this study, and the following chapter will present the analysis of these data and tests of the hypotheses presented in Chapter I.

CHAPTER III

METHOD OF ANALYSIS

Introduction

This chapter will describe the procedures followed in testing the hypotheses outlined in Chapter I. This description includes discussion of: (1) the questionnaire used to collect the data, (2) the sample and administration of the questionnaire, (3) the description of the major operational procedures, and (4) the description of the methods used in the analysis of the data.

The Questionnaire

The questionnaire used for this study, the M.S.U. Work Beliefs Check-List, was designed by Professor A. O. Haller of the Department of Sociology and Anthropology, Michigan State University. This instrument consists of forty-four statements which, for the purposes of this study, are categorized into six value areas. Each of these areas relates to two or more

work-related values relevant to participation in industrial work situations. (These value areas were described in Chapter I.)

The subjects are asked to respond to this instrument by indicating their agreement or disagreement with each item. The responses are scored according to their evident acceptance or nonacceptance of a related value. Responses indicative of acceptance are assigned a score of one; opposite responses are assigned a score of zero. These items are given below. The response indicative of the acceptance of an industrial value is shown opposite each item.

A similar rationale and method of scoring has been followed in previous studies employing this instrument,¹ and it has been assumed that samples approaching a high degree of industrialization will have higher scores than those with a low degree of industrialization (Watts 1962). This assumption implies that the acceptance of these values is directly and positively associated with industrialization. In the present study the relationship between these values and industrialization is approached somewhat differently. It is assumed that the work-related values of concern to this thesis are particularly relevant to effective participation in industrial work situations. It has been shown, in a survey of previous literature, that certain categories of

¹For a more detailed discussion of the previous use of this instrument see Appendix M.

respondents are more likely to be committed to participation in such situations and to effective participation in these situations. It is assumed, therefore, that the socialization of these categories of respondents has been such as to result in a differential acceptance of these values that is in proportion to the differential participation in the industrial labor force which can be expected of them.

<u>M.S.U. Work Beliefs Check-List</u>		Response Indicating Acceptance of an Industrial Value
1.1	The only purpose of working is to make money	Agree
1.2	I believe a man needs to work in order to feel that he has a real place in the world	Agree
1.3	I feel sorry for people whose jobs require that they take orders from others	Disagree
1.4	Every man should have a job that gives him a steady income	Agree
1.5	The happiest men are those who work only when they need money	Agree
1.6	Doing a good job day in and day out is one of the most satisfying experiences a man can have	Agree
1.7	A regular job is good for one	Agree

- | | | |
|-----|--|----------|
| 1.8 | I feel sorry for rich people who never learn how good it is to have a steady job | Agree |
| 2.1 | I don't like people who are always right on time for every appointment they have | Disagree |
| 2.2 | I feel sorry for people who have to do the same thing every day at the same time | Disagree |
| 2.3 | I don't like to have to make appointments | Disagree |
| 2.4 | I believe that promptness is a virtue . . . | Agree |
| 2.5 | I usually schedule my activities | Agree |
| 2.6 | I'd rather let things happen in their own way rather than scheduling them by a clock | Disagree |
| 2.7 | It makes me feel bad to be late for an appointment | Agree |
| 2.8 | I expect people who have appointments with me to be right on time | Agree |
| 3.1 | I would be unhappy living away from my relatives | Disagree |
| 3.2 | I hope to move away from here within the next few years | Agree |
| 3.3 | People who can't leave their hometowns are hard for me to understand | Agree |
| 3.4 | A man's first loyalty should be to his home community | Disagree |
| 3.5 | When a boy becomes a man, he should leave home | Agree |

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| 4.1 | I like to try new things | Agree |
| 4.2 | On the whole, the old ways of doing things are the best | Disagree |
| 4.3 | Life would be boring without new experiences | Agree |
| 4.4 | I like people who are willing to change | Agree |
| 4.5 | On the whole, most changes make things worse | Disagree |
| 4.6 | The happiest people are those who do things the way their parents did | Disagree |
| 4.7 | New things are usually better than old things | Agree |
| 4.8 | I like to see new things and meet new people | Agree |
| 5.1 | I believe that a person can get anything he wants if he's willing to work for it . . | Agree |
| 5.2 | Man should not work too hard, for his fortune is in the hands of God | Disagree |
| 5.3 | A man shouldn't work too hard because it won't do him any good unless luck is with him | Disagree |
| 5.4 | With a little luck I believe I can do almost anything I really want to do | Agree |
| 5.5 | A person shouldn't hope for much in this life | Disagree |
| 5.6 | If a man can't better himself it's his own fault | Agree |

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|-----|--|----------|
| 5.7 | Practically everything I try to do turns out well for me | Agree |
| 5.8 | I usually fail when I try something important | Disagree |
| 6.1 | I would rather work than go to school . . | Disagree |
| 6.2 | Money is made to spend, not to save | Disagree |
| 6.3 | I think there's something wrong with people who go to school for years when they could be out earning a living | Disagree |
| 6.4 | One gains more in the long run if he studies than if he gets a job | Agree |
| 6.5 | The more school a person gets the better off he is | Agree |
| 6.6 | Generally speaking, things one works hard for are the best | Agree |
| 6.7 | When I get a little extra money I usually spend it | Disagree |

The Translation of the Instrument

The questionnaire was originally designed in English. The following is an outline of the procedure followed in translating the English version of the questionnaire into Japanese:

1. Four translators were utilized in the translation of the instrument into Japanese. For convenience these translators are designated by the letters a, b, c, and d. Pertinent characteristics

of the translators were as follows: (a) A male Japanese graduate student of sociology. (b) A male Japanese university student, an English major and editor of an English-language newspaper published by his university. (c) A female Japanese experienced in translating literary works. (d) A female American who had received all of her high school education in Japanese schools and was attending a Japanese university; her previous education was received in schools in the United States.

2. Translators a, b, and c translated the original English version of the questionnaire into Japanese.

3. These Japanese translations were given to translators b and c to translate into English, each working on translations other than his own, and these translations were compared with the original English version.

4. The author interviewed translators b, c, and d, using the English and Japanese translations of the questionnaire as interview guides, to determine the closest Japanese approximation of the original English instrument.

5. The Japanese instrument was pretested with a sample of urban high school students, and several final adjustments in translation were made on the basis of students' queries as to the meaning of items.

6. When the questionnaires were administered to the rural junior high school students who comprised the sample, their teachers read the questionnaires to the students to insure uniform understanding of the form of the written language used in the questionnaires.

It is felt that this procedure resulted in the respondents receiving a reasonably good approximation of the original English version of the instrument.

The Sample

The community from which the sample used in the present study was selected was chosen on the basis of proximity to an urban-industrial center, a history of out-migration of youth to that center, and ease of access. The criterion of proximity to an urban-industrial center is important, since the study required respondents who could be expected to have some knowledge of urban-industrial life and a realistic possibility of exposure to it. The area chosen had a past history of out-migration to the Tokyo urbanized area (Bennett and Ishino 1955:43), and the category of respondents selected for the survey--young people in their last year of compulsory schooling--provided a large proportion of these out-migrants.

To minimize expenditure of time and money, it was necessary to select a site close to my residence in Tokyo. The site chosen is approximately three hours from Tokyo, near enough to reduce travel expenses and the necessity for overnight trips.

Entré to communities and schools located in such communities is, in Japan, particularly dependent upon personal association with individuals in responsible administrative positions. Dr. Iwao Ishino and Dr. John Donoghue of the Department of Sociology and Anthropology of Michigan State University were using this community as one of the sites for their study of Japanese villages. Their assistance in establishing rapport with principals and teachers made the administration of questionnaires possible. This factor was a major one in choosing the community from which respondents were selected.

Description of the Community of Residence

Emi Machi, the home community of the respondents of this study, is located on the Pacific seacoast in Chiba Prefecture, approximately eighty miles southeast of Tokyo.

The present Emi Machi was formed as a political unit in 1958 through the consolidation of the then separate political units of Emi Machi, Futomi Mura, and Soro Mura, each with approximately

three thousand population. An indication of the nature of these communities is provided in Table 13, which presents the occupational composition of these communities in 1959.

Description of the Sample

The sample consists of the 176 ninth-grade students of the three junior high schools of Emi Machi in June, 1959. These students are all fourteen or fifteen years of age, and with a single exception they had lived all their lives in a single community.

The general characteristics of the students are given in Table 14 in terms of the independent variables used in the analysis of data.

Administration of the Questionnaire

Questionnaires were administered to students in their homerooms at a preset time. The students' teachers and an interpreter assisted me. At a later date teachers administered questionnaires to the several students who had been absent when the questionnaire was first administered.

TABLE 13.--Means of livelihood for households in Emi Machi,
Futomi Mura, and Soro Mura (percent frequency).^a

Means of Livelihood	Emi	Futomi	Soro
Farming	34.0	32.2	79.0
Fishing	15.5	27.9	-
Fish processing	0.5	1.1	-
Forestry	2.1	0.4	0.6
Merchant	8.3	6.5	2.8
Salaried white-collar	16.0	12.9	7.6
Artisans	6.6	4.2	1.4
Day laborer	4.1	3.8	2.3
Others	4.1	4.1	4.2
Unemployed	7.8	6.7	2.1
Owner of industrial plant	1.0	0.2	-

^aFrom Emi Machi 1959:Appendix, p. 1.

TABLE 14.--Characteristics of the sample.

Characteristic	Number	Pct. of Total Sample
<u>All Respondents</u>		
Male	86	48.9
Female	90	51.1
First-born	73	41.5
Non-first-born	103	58.5
<u>Male Respondents</u>		
First-born	33	18.8
Non-first-born	53	30.1
<u>Female Respondents</u>		
First-born	40	22.7
Non-first-born	50	28.4

Operational Procedures in the Specification of Variables

Orientation to values

A respondent's orientation to these values is determined by his responses to items indicative of his acceptance or rejection of work-related values relevant to effective participation in industrial work situations. The subjects giving the greater number of responses indicating acceptance of these values are considered to demonstrate a greater potential for effective participation in the industrial labor force.

Order of birth

The variable which requires operational specification for the particular purpose of this study is that of order of birth. For this variable the major concern of the study is whether or not a respondent was the first-born of siblings of the same sex. Thus, a respondent who is the first male child born in his family is classified as "first-born" though he may have an older female sibling. This operational specification follows the distinction among children in the family customarily made by the Japanese themselves.

Data Analysis

Statistical tests

In this study no attempt is made at statistical generalization of the results of the analysis of this sample to a larger population. Statistical tests are used for evaluating apparently marked differences in distributions of responses and of scores and ranks based upon these responses; that is, they are used as a "yardstick" for evaluating differences. It is realized that non-random factors in the selection of the sample tend to diminish the value of the statistics. The significance level accepted for all statistical tests is the .05 level. In conjunction with the use of statistical tests, an attempt is made to determine whether regularities or patterns in responses are associated with the independent variables.

Scalogram analysis¹

Scalogram analysis is employed in this study for evaluating the statements used in each of the six value areas to determine whether or not they are perceived by the respondents as

¹The following sources provide extensive discussions of scalogram analysis: Edwards 1957:172-200; Guttman 1947:451-65; Riley et al. 1954; Torgerson 1958:307-31.

having a similar meaning. If a set of statements constituting a value area meets the requirements of a unidimensional scale, it is assumed that the statements fall along a single dimension and that the responses of the subjects to the statements are determined by their position on this dimension.

It is not possible to tell in advance whether the statements used in each value area fall along a single continuum from least to most favorable. The purpose of scalogram analysis is to determine whether, if we start with this as a hypothesis, the responses of the subjects are in accord with the hypothesis of a single dimension. If the responses of subjects to the statements in each value area are in accord with the theoretical model of a unidimensional scale of statements, the scores of subjects upon the statements will be interpreted as likewise falling along the same unidimensional continuum.

Procedure for the development and evaluation of Guttman Scales.--The procedure followed in the scalogram analysis of the six areas is outlined below.

1. Responses were considered positive if they indicated acceptance of the related value. These positive responses were

given a score of 1, and the opposite, or negative, response to an item a score of 0.

2. These scores were punched on IBM cards, which were sorted to determine the percentage of positive responses to each item.

3. Items falling within the approximate range of 20 to 80 percent positive were utilized for the development of scales.

4. Cards were sorted in order from respondents giving the greatest number of positive responses to those giving the least number of positive responses.

5. Responses were then printed out in this order, the order of items ranging from that with the fewest positive responses to that with the most.

6. Scale types and errors to scale type were assigned in the usual manner employed in scalogram analysis. Respondents were assigned to those scale types which produced a minimum of error, and, where a respondent could be assigned to two scale types with the same error count in each, the rule of thumb employed was to assign him to the scale type nearest the middle of the scale.

Statistical significance of scalogram.--Karl F. Schuessler

(1961) has described a technique for statistically evaluating a Guttman scale. This technique enables the researcher to rule out chance as an explanation of a scale. In cases where the number of items is small and/or the marginals are extreme, this procedure should be employed as a check against the possibility that chance accounts for the resulting scale.

Basically this procedure, as employed in the present study, consists of calculating the chance frequencies of the respective response patterns and designating scale types accordingly. A comparison is then made of the observed and expected frequencies of scale types and nonscale types within specific score categories. A chi-square value is computed which enables one to test the hypothesis that scale frequencies are a chance phenomenon. This procedure provides a test of the hypothesis that reproducibility is a chance outcome, since reproducibility is a function of the ratio of scale types to nonscale types. Therefore, a demonstration of the significance of this ratio is also a demonstration of the significance of observed reproducibility.

In the present study all scales are evaluated by the use of the procedure described by Schuessler, and those scales for which a chi-square value is produced which has a probability of

occurrence of .05 or less will be accepted as Guttman scales if they approximate the additional criteria mentioned below.

Coefficient of reproducibility.--The principal test of scalability employed in a scalogram analysis is the coefficient of reproducibility. To compute this coefficient the proportion of errors to total responses to all items being scaled is subtracted from unity. This value is intended to indicate the percentage of accuracy with which responses to the various statements can be reproduced from the total scores. The empirical rule as to the acceptance of a set of items as sufficiently scalable has varied from .85 to .90. The latter value is the more commonly used at present (Guttman 1947:455). In addition to the coefficient of reproducibility, the following features of the scale are to be taken into account: (1) range of marginals, (2) random scatter of errors, and (3) number of items used (Guttman 1947:453).

Coefficient of scalability.--Herbert Menzel (1953) has described a procedure which may be used for evaluating the effect of extreme marginals of items upon a coefficient of reproducibility. This procedure results in a value termed the coefficient of scalability. This coefficient varies from 0 to 1, and is a measure of the scalability of the items used. This coefficient makes it

possible to speak meaningfully of degrees of scalability, instead of merely deciding whether a set of items does or does not scale. Menzel suggests that the level of acceptance for this coefficient may be between .60 and .65.

Minimal marginal reproducibility.--The reproducibility of any single item can never be less than the proportion present in the modal response category. Statements with a high modal frequency--i.e., extreme marginals--must yield a high coefficient of reproducibility.

The minimum coefficient of reproducibility which it is possible to obtain with a given set of statements having known frequencies in each of the categories of response can easily be determined. Simply find the proportion of responses in the modal category for each statement. If these values are then summed and divided by the number of statements, the resulting value indicates the minimal marginal reproducibility present for the set of statements. [Edwards 1957:192]

The minimal marginal reproducibility may then be subtracted from the coefficient of reproducibility obtained from the same data to note the improvement gained through scaling of items (Edwards 1957:193).

CHAPTER IV

ANALYSIS OF THE DATA AND TEST OF HYPOTHESES

Introduction

This chapter presents the analysis of the data in three sections. The first is a brief discussion of the responses of all respondents to the items constituting each of the six value areas. The second section describes the scalogram analysis of these responses, and the third presents the test of hypotheses.

Total Responses

As has been explained, each item in the questionnaire is scored so that one of the two alternative responses indicates the acceptance of a work-related value and is considered a positive response. In general, these rural young people have given a high proportion of positive responses to the items constituting the several value areas. Value Area III, "orientation to physical mobility," provides an exception to this general tendency. In

addition, there are instances in which several items within a value area have a noticeably smaller proportion of positive responses than the remaining items in that area. These will be considered in the discussions of each value area.

Orientation to work

The distribution of responses to items constituting Value Area I is presented in Table 15. The proportion of positive responses given to items in two of the subareas is relatively low. These subareas are those of "monetary reward as an incentive to work" and "hierarchical work relationships." This indicates that on the whole these young rural respondents do not view the acquisition of money as a primary reason for working, nor do they indicate a liking for hierarchical work relationships.

Orientation to structured time

The distribution of responses to items constituting Value Area II is presented in Table 16. In general a high proportion of positive responses is given to the items in this area. There is some indication that there may be a lower degree of acceptance of "repetitive activity" than of the remaining two subareas. However, over-all, the responses indicate a high degree of acceptance

TABLE 15.--Percent of total respondents giving positive responses to items constituting Value Area I.

Value Subareas	Item	f	Pct.	Mean Pct.
Monetary reward as an incentive to work	1.1	84	48	
	1.5	27	15	32
Work as necessary for a feeling of security	1.2	156	89	89
Steady employment and income	1.4	136	77	
	1.6	147	84	
	1.7	150	85	
	1.8	116	66	78
Hierarchical work relationships	1.3	55	31	31

TABLE 16.--Percent of total respondents giving positive responses to items constituting Value Area II.

Value Subareas	Item	f	Pct.	Mean Pct.
Promptness	2.1	128	73	
	2.4	151	88	
	2.7	159	90	
	2.8	171	97	87
Repetitive activity	2.2	119	68	68
Scheduling activities	2.3	120	68	
	2.5	163	93	
	2.6	142	81	81

by the respondents of the values relating to the structuring of one's time.

Orientation to physical mobility

The distribution of positive responses to items constituting Value Area III is presented in Table 17. The average proportion of positive responses to items in this area is relatively low when compared to the over-all responses for other areas. This suggests a general unwillingness of these respondents to disrupt established ties to kin and community, which appears to be somewhat more evident for ties to community than for ties to kin.

Orientation to change

The distribution of positive responses to items constituting Value Area IV are presented in Table 18. The average proportion of positive responses to one subarea, the area of "change," differs noticeably from the two remaining areas. This suggests that respondents have a lower degree of acceptance of values supporting change per se than of values favoring "that which is new" and a "break with tradition."

TABLE 17.--Percent of total respondents giving positive responses to items constituting Value Area III.

Value Subareas	Item	f	Pct.	Mean Pct.
Kinship ties	3.1	108	61	
	3.5	91	52	56
Community ties	3.2	108	61	
	3.3	73	41	
	3.4	31	18	40

TABLE 18.--Percent of total respondents giving positive responses to items constituting Value Area IV.

Value Subareas	Item	f	Pct.	Mean Pct.
Change	4.4	37	21	
	4.5	62	35	28
That which is new	4.1	153	87	
	4.3	150	85	
	4.7	146	83	
	4.8	103	58	78
Break with tradition	4.2	151	86	
	4.6	121	69	78

Orientation to future events

The distribution of positive responses to items constituting Value Area V are presented in Table 19. A relatively high average proportion of positive responses is given to items of this area. The higher average proportion of positive responses given to the subarea of "self-determination" indicates a strong acceptance of values supporting the self-determination of events.

Orientation to occupational and economic advancement

The distribution of positive responses to items constituting Value Area VI is found in Table 20. The relatively high average proportion of positive responses to the subareas of this value area indicates a rather strong, uniform acceptance of values supporting occupational and economic advancement.

Summary

The two summary tables below give the average proportion of positive responses to each area by all respondents (Table 21) and the average proportion of positive responses to each subarea by all respondents (Table 22). These tables indicate the difference in degree of acceptance by all respondents of work-related values selected for this study. The remainder of this analysis will be directed toward determining the extent to which the

TABLE 19.--Percent of total respondents giving positive responses to items constituting Value Area V.

Value Subareas	Item	f	Pct.	Mean Pct.
Self-determination	5.1	114	65	
	5.2	160	91	
	5.3	163	93	
	5.4	120	68	
	5.6	162	92	82
Optimism	5.5	114	65	65
Probability of success	5.7	149	85	
	5.8	76	43	64

TABLE 20.--Percent of total respondents giving positive responses to items constituting Value Area VI.

Value Subareas	Item	f	Pct.	Mean Pct.
Education	6.1	118	67	
	6.3	150	85	
	6.4	158	90	
	6.5	118	67	77
Thrift	6.2	103	68	
	6.7	136	77	72
Hard work	6.6	155	88	88

TABLE 21.--Summary table: value areas ranked by average percent of positive responses given to each area by total respondents.

Area	Avg. Pct. of Positive Responses	Rank
Orientation to structured time	82	1
Orientation to occupational and economic advancement	77	2
Orientation to future events	75	3
Orientation to change	66	4
Orientation to work	62	5
Orientation to physical mobility	47	6

TABLE 22.--Summary table: value subareas ranked by average percent of positive responses given to each subarea by total respondents.

Subarea	Avg. Pct. of Positive Responses	Rank
Work as necessary for a feeling of security	89	1
Hard work	88	2
Promptness	87	3
Self-determination	82	4
Scheduling activities	81	5
Steady employment and income	78	7
That which is new	78	7
Break with tradition	78	7
Education	77	9
Thrift	72	10
Repetitive activity	68	11
Optimism	65	12
Probability of success	64	13
Kinship ties	56	14
Community ties	40	15
Monetary reward as an incentive to work	32	16
Hierarchical work relationships	31	17
Change	28	18

characteristics of sex and birth order appear to influence the acceptance of these values.

Scalogram Analysis

This section presents the results of the scalogram analysis of the responses to the items constituting each value area. Table 23 presents the items used for developing the scales for each of the value areas. The percentage of positive responses is given for each of these items. Items are excluded from the scalogram analysis only on the basis of an extreme proportion of positive or negative responses to the item.

The statistical significance of the Guttman scales derived from the sets of items shown in Table 23 has been determined in the manner described by Schuessler. The resulting chi-square values are given in Table 24.

On the basis of these values it is accepted that the scales for Value Areas II and III do not result from chance. These scales will be evaluated through the use of criteria previously described. Table 25 presents the values for the several measures employed for the evaluation of these scales.

The coefficients of reproducibility for these two scales are somewhat lower than the now generally accepted value of .90.

TABLE 23.--Items used in scalogram analysis ordered on the basis of percent positive responses.

Value Area	Item	Percent Positive Response
I. Orientation to work	1.3	31
	1.1	48
	1.8	66
	1.4	77
II. Orientation to structured time . .	2.2	68
	2.3	68
	2.1	73
	2.6	81
III. Orientation to physical mobility	3.4	18
	3.3	41
	3.5	52
	3.2	61
	3.1	61
IV. Orientation to change	4.4	21
	4.5	55
	4.8	58
	4.6	69
V. Orientation to determination of future events	5.8	43
	5.5	65
	5.1	65
	5.4	68
VI. Orientation to occupational and economic advancement	6.2	58
	6.5	67
	6.1	67
	6.7	77

TABLE 24.--Statistical significance of Guttman scales derived from responses to the six value areas.

Value Area	Chi-square	Degrees of Freedom	Significance Level
I. Orientation to work . .	6.22	7	.70
II. Orientation to struc- tured time	29.16	7	.001
III. Orientation to physi- cal mobility	20.20	9	.02
IV. Orientation to change	1.91	7	.98
V. Orientation to deter- mination of future events	10.27	7	.20
VI. Orientation to occu- pational and economic advancement	10.84	7	.20

TABLE 25.--Coefficient of reproducibility, coefficient of scalability, and minimal marginal reproducibility of scales for Value Areas II and III.

Evaluation Measure	Value Area	
	II	III
Coefficient of reproducibility (R)87	.87
Coefficient of scalability (S)54	.64
Minimal marginal reproducibility (MMR)72	.63
Improvement over MMR due to scaling15	.24

Inspection of the scales indicates no groupings of errors, but a more or less random error distribution.

One of these scales, that for Value Area II, has relatively extreme marginals. All items in this area have more than 50 per-cent positive responses. When this scale is compared with that for Value Area III, the effect of these marginals can be seen in the lower values for the coefficient of scalability for this scale, and in the smaller value indicating the degree of improvement over the minimal marginal reproducibility.

For the purposes of the present study these two scales are accepted as quasi scales which are adequate for ordering respondents along the dimension related to each of the two value areas. The scale for Value Area III appears to be more reliable than that for Value Area II.

In those four areas for which scales have not been accepted, I will analyze responses to those items for which the total proportion of positive responses is more than .10 and less than .90. Thus in general we have used the largest defensible combination of items in testing the hypotheses. Where quasi scales exist (Areas II and III) these are used as wholes. Where items are not scalable they are treated separately, being loosely

grouped for purposes of discussion into clusters which appear to have similar manifest content.

Test of Hypotheses

The first hypothesis to be tested against these data states that differences will be found in the degree to which categories of respondents indicate, in their responses, their acceptance of work-related values and that these differences will follow a predictable order:

Hypothesis 1: When respondents are categorized by the sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate the greatest acceptance of work-related values, respondents in Category III will indicate the least acceptance of work-related values, and respondents in Category II will indicate a degree of acceptance intermediate to these two categories.

The results of statistical tests of differences in responses to items forming the various value areas are found in Appendixes A through F. A summary tabulation, Table 26, presents the items for which statistically significant differences are found for the responses given to these items by the three categories of respondents. There are a total of eight items for which significant differences are found. This is from a total of thirty specific chi-square tests. Eight significant chi-square values is far in

TABLE 26.--Summary table: items for which categories of respondents give significantly different responses (percent of positive responses).

Item	Category ^a			Chi-square Probability
	I	II ^b	III	
1.2	81	93	92	.02 < p < .05
1.4	85	82	58	.001 < p < .01
1.7	92	87	72	.02 < p < .05
4.1	94	80	92	.02 < p < .05
4.5	36	45	15	.001 < p < .01
5.1	76	54	72	.02 < p < .05
5.5	74	68	48	.02 < p < .05
5.7	91	84	72	.02 < p < .05
Mean	79	74	65	

^aKey: I = Non-first-born Males; II = First-born Males and Non-first-born Females; III = First-born Females.

^bThe percent of positive responses to these items by first-born males and non-first-born females is given in Appendix L.

excess of the number one would expect due to chance at the .05 level.

The results of tests shown in Table 26 suggest that the several categories of respondents do tend to differ in their acceptance of work-related values. More specifically, the results indicate that these categories of respondents differ in their orientations to values concerned with work, change, and the determination of future events, as these are the three value areas which contain the items for which significant differences are found.

The result of a specific statistical test of Hypothesis 1 is found in Table 27, which presents the rank order of the three categories of respondents for each of the items for which significant differences are found. These ranks are based on the proportion of respondents in each category who give positive responses to these items.

The sums of ranks for these items indicate that Category I respondents rank first in the acceptance of values forming the three general value areas for which significant differences are found. The sums of ranks also indicate that Categories II and III follow Category I in the order predicted by Hypothesis 1. On the basis of the results of these statistical tests I accept the evident differences in orientations to these work-related values as

TABLE 27.--Rank order of respondents, based upon percent of positive responses to items for which responses are significantly different.

Item	Category		
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females
1.2	3	1	2
1.4	1	2	3
1.7	1	2	3
4.1	1	3	2
4.5	2	1	3
5.1	1	3	2
5.5	1	2	3
5.7	1	2	3
Sum of Ranks	11	16	21

Coefficient of concordance: $W = .41$; $p < .05$.

differences which have not occurred by chance and consider the data as support for Hypothesis 1.

Area of residence

Since researchers who study rural Japan frequently stress differences among rural Japanese communities, especially between farming and fishing villages (e.g., DeVos and Wagatsuma 1961), it may be asked whether the sample of respondents used for the above tests of hypotheses might conceal such differences. The sample I have used for this study was drawn from a political unit designated as Emi Machi. This political unit had recently been formed through the consolidation of the three formerly separate communities of Emi Machi, Futomi Mura, and Soro Aza (occupational characteristics of residents of these communities are presented in Table 13). It is possible that each of these residence areas might have particular environmental characteristics which would exert a peculiar influence upon the orientation of respondents to work-related values.

The size of the sample used does not allow the use of statistical tests of data for which the area of residence of individual respondents is controlled. However, when respondents are categorized by sex and birth order, according to area of

residence, and ranked by mean percent of positive responses, the previously demonstrated order of these categories persists.

This is demonstrated by Table 28, which presents the mean percent of positive responses given by these categories of respondents to items for which a significant difference in responses has been found, and by Table 29, which presents the rank order of categories of respondents, based on percent of positive responses. These tables indicate that place of residence does not exert an influence upon respondents which is contrary to the effects of sex and order of birth.

The second hypothesis to be tested against these data states that the three categories of respondents will differ in the degree to which their responses indicate an association between willingness to disrupt ties to kin and community and other work-related values:

Hypothesis 2: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, the association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values will be closer for respondents in Category I than for any other category, in Category III respondents will indicate the least association between these values, and in Category II respondents will indicate an intermediate amount of association between these values.

TABLE 28.--Mean percent of positive responses to items for which categories of respondents give significantly different responses, according to village of residence.

Village of Residence	Category		
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females
Emi Village	76	70	66
Futomi Village	83	75	67
Soro Village	79	73	67
Mean	79	73	67

TABLE 29.--Rank order of respondents, based on mean percent of positive responses to items for which categories of respondents give significantly different responses, according to village of residence.

Village of Residence	Category		
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females
Emi Village	1	2	3
Futomi Village	1	2	3
Soro Village	1	2	3

Subhypothesis 2a: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, a larger proportion of respondents in Category I than in any other category will indicate in their responses a positive association between willingness to disrupt their ties to their rural environment and the acceptance of other work-related values, in Category III the smallest proportion of respondents will indicate association between these values, and in Category II an intermediate proportion of respondents will indicate association between these values.

Subhypothesis 2b: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate a greater degree of association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values than those in any other category, respondents in Category III will indicate the least degree of association between these values, and respondents in Category II will indicate an intermediate degree of association between these values.

The first data to be considered in relation to this hypothesis are found in Appendixes G through K. A summary tabulation, Table 30, is based on data from these basic data tables. Table 30 presents the mean percent of respondents positively oriented to physical mobility and to the items forming each of the remaining value areas. These means are presented for each category of respondents. The over-all average for each category is given at the bottom of the table. This over-all average is highest for respondents in Category I and lowest for those in Category III.

TABLE 30.--Mean percent of respondents who are positively oriented to both physical mobility (scale scores 3-5) and to items constituting the remaining value areas.

Value Area	Category		
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females
I	38	34	25
II	34	29	32
IV	37	29	25
V	40	30	25
VI	42	32	28
Mean	38	31	27

The average for respondents in Category II lies between the averages for the other two categories.

When the three categories of respondents are ranked on the basis of the proportions presented in Table 30, the resulting rank order is as shown in Table 31. The best indicator of the ranks of these categories is the sums of ranks at the bottom of the table.

These data are accepted as providing support for Hypothesis 2a.

Degree of association between orientation
to physical mobility and other
work-related values

The above discussion is centered upon the proportion of respondents in each category who are positively oriented to physical mobility and to other work-related values. The strength or degree of this association for the several categories of respondents is indicated by the data presented in the summary tabulation, Table 32. This table shows the items for which statistically significant phi coefficients are produced by the association of mobility and other values for each category of respondents. This table clearly indicates that the association between mobility and other work-related values is greater among respondents of

TABLE 31.--Rank order of respondents, based upon average proportion of respondents positively oriented to both physical mobility (scale scores 3-5) and to items constituting the remaining value areas.

Value Area	Category		
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females
I	1	2	3
II	1	3	2
IV	1	2	3
V	1	2	3
VI	1	2	3
Sum of Ranks	5	11	14

Coefficient of concordance: $W = .88$.

TABLE 32.--Summary table: items for which there is a significant association between orientation to physical mobility and other industrial values.

Category	Item	Phi	Chi-square Probability
I. Non-first-born males	1.8	.35	.01 < p < .02
	4.8	.47	p < .001
	5.4	.33	.01 < p < .02
	6.1	.35	.01 < p < .02
	6.5	.39	.001 < p < .01
	6.7	.29	.02 < p < .05
II. First-born males and non-first-born females	5.4	.28	.01 < p < .02
	6.3	.24	.02 < p < .05
III. First-born females	No significant chi-square values.		

Category I than among respondents of other categories, and the degree of association for the remaining categories is as predicted. This association is particularly evident in relation to orientation to occupational and economic advancement. This suggests that, for non-first-born males in particular, willingness to leave their community of residence is associated with a positive evaluation of occupational and economic advancement.

These data are accepted as providing support for Hypothesis 2b.

Summary

The analysis of data collected for this study provides support for both of the hypotheses of the thesis. A frame of reference which utilizes sex and birth-order characteristics as related to participation in the industrial labor force has been employed to predict the direction of differential acceptance of work-related values by respondents categorized by these characteristics. The ordering of the data supports the predicted direction of differences for both hypotheses, thus suggesting that the framework of analysis employed in the thesis is a fruitful one for analysis of orientations to industrial situations.

CHAPTER V

SUMMARY AND CONCLUSIONS

Introduction

This dissertation began with a proposition which is basic to the understanding of participation in the labor force of any society where there is a division of labor by sex. Participation in the labor force of such societies is different for males than for females, and in the course of their socialization each will develop different orientations to values particularly relevant to this differential participation.

The initial theoretical statement was expanded for the purpose of this dissertation to encompass differences in order of birth, in recognition that in Japan, the society of concern to this thesis, order of birth is not only important in determining which males will join the labor force, but in influencing their adjustment to the industrial situation. Although the traditional cultural emphasis upon order of birth has been generally considered

relevant only to male children, I have proposed that this emphasis affects female children as well.

The hypothesized effect of sex and birth order rests upon conclusions drawn from previous literature describing differences in male and female participation in the labor force, differences in male and female orientations to work-related values, and similar differences for first-born and non-first-born males.

In effect, the logical extension of the initial theoretical statement leads to the proposition that order-of-birth differences exist among Japanese females as well as males. There are some suggestions in studies of the Japanese family that the position of the first-born female child in relation to her younger sisters is in some respects similar to that of the first-born male in relation to his younger brothers.

One of the more obvious similarities is a consequence of the age-grading which is a prominent feature of the Japanese family. This is illustrated in the following quotations:

Within the circle of closest relatives, Japanese differs from English terminology in one significant respect: relative age is specified in the terms used for all siblings. . . . The age-distinction which is thus built into the terminology reflects actual behavioral discrimination, for siblings do have differential rights to inheritance and other privileges, the eldest being favored over junior siblings. Brothers and sisters are conditioned to anticipate unequal treatment through the everyday kinship terms they learn as they first

begin to prattle; so when they actually receive unequal treatment, as they do in fact, they are not impelled to question it. [Beardsley et al. 1954:243-44]

Adolescence is a trying period for both sexes, but evidence seems to indicate that the girl has less difficulty with this period than does the boy. She has been taught to obey the members of her family; only her younger sisters are subordinate to her in the immediate family. [Smith, R. J. 1962: 197]

A second possible similarity between the position of a first-born female and a first-born male is in marriage and the perpetuation of the family; i.e., the household and the family name. Normally, the eldest son of the family remains in the household and maintains family traditions. If there are only female children in a family, a marriage may be arranged whereby the daughter's husband is adopted into the family, to assume her family name and maintain her family's traditions. If there is more than one daughter, it is most likely to be the first-born daughter who marries the male selected for adoption. The following quotations describe this process:

. . . a couple with daughters but no sons will "adopt" a husband for a daughter, i.e. the man will marry into the "house" of, and take the surname of, the wife. The provision in the new Civil Code which permits a married couple to adopt the family surname of either party . . . is, in fact, expressly designed to cover such cases. [Dore 1958:145]

A daughter has no permanent place in her natal home and very little chance to continue life in her native village, for eventually she marries elsewhere. One daughter may

stay home, however, if her household lacks male heirs, and adopts a man to become her husband and the household heir.

Though various examples of shifted positions might be cited, only one is so common as to be taken for granted. This is the adoption of a marriageable but often unrelated young man as eldest son by households that have produced no sons. This adopted eldest son takes on a role identical to that of an inborn eldest son, except that he marries the eldest daughter of the house instead of a girl from outside. [Beardsley et al. 1962:144-45]

These brief illustrations suggest that the position of a first-born female in relation to that of a non-first-born female may be such as to produce some differences in orientations to values similar to those existing between first-born and non-first-born males.

From the over-all theoretical statement two hypotheses were derived and tested against the data secured for this study. The hypotheses are as follows:

Hypothesis 1: When respondents are categorized by the sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate the greatest acceptance of work-related values, respondents in Category III will indicate the least acceptance of work-related values, and respondents in Category II will indicate a degree of acceptance intermediate to these two categories.

Hypothesis 2: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, the association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values will be closer for respondents in Category I than for any other category, in Category III respondents will

indicate the least association between these values, and in Category II respondents will indicate an intermediate amount of association between these values.

Subhypothesis 2a: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, a larger proportion of respondents in Category I than in any other category will indicate in their responses a positive association between willingness to disrupt their ties to their rural environment and the acceptance of other work-related values, in Category III the smallest proportion of respondents will indicate association between these values, and in Category II an intermediate proportion of respondents will indicate association between these values.

Subhypothesis 2b: When respondents are categorized by sex and birth-order characteristics as specified in this thesis, respondents in Category I will indicate a greater degree of association between willingness to disrupt ties to the family and rural environment and the acceptance of other work-related values than those in any other category, respondents in Category III will indicate the least degree of association between these values, and respondents in Category II will indicate an intermediate degree of association between these values.

These hypotheses were tested against data consisting of the responses of young rural Japanese in their last year of compulsory schooling (ninth grade) to an instrument designed to elicit indications of their acceptance or nonacceptance of selected work-related values relevant to effective participation in industrial work situations. Those responses which indicate the acceptance of a value are considered to reflect the respondent's positive orientation

to that value. Values of manifestly similar content are combined into value areas.

Analysis of the Data and Need for Further Research

The results of the analysis of data supported Hypothesis 1, and I have accepted the hypothesis. These results indicate that not only do the combined effects of sex and birth order influence orientations to work-related values, but they do so in a predictable, ordered fashion. The data also indicate that this influence is not altered by type of occupational environment of the rural residence of the respondents.

These results lead to the conclusion that the family position of rural children, as specified by sex and birth order, affects that part of their socialization which leads to the acceptance or nonacceptance of work-related values.

Since differences were found in only three of the six value areas examined, it must be assumed that these characteristics of family position do not exert an equally strong influence upon the acceptance of all work-related values. Further research will be necessary to determine the reasons for this variation in acceptance of work-related values.

A particularly interesting aspect of this analysis is the evidence suggesting that first-born females exhibit the least acceptance of work-related values. This type of orientation was predicted by a logical extension of the theoretical framework of the thesis. Although previous literature, as indicated above, does suggest that first-born females may occupy a different position in the family from other females, there is no research which clarifies the effect of this position upon orientations to values. Further research is needed to determine the extent of the effect of this position upon orientation to values and to describe the probable causal relationship between this position and orientation to work-related values.

The second hypothesis is derived from the same theoretical framework as the first, but is focused more specifically upon a particular substantive problem. The question of concern here is the degree to which various categories of respondents seem to be predisposed toward effective participation in industrial work situations.

The analysis of data testing the first hypothesis indicated that non-first-born males exhibit the greatest acceptance of work-related values, first-born females the least acceptance, and the remaining respondents an intermediate degree of acceptance. The

value area concerned with physical mobility (Value Area III) was not included in the analysis of the categories of respondents in terms of their acceptance of work-related values, because significant differences were not found among them in this value area. This suggests that factors other than position in the family, as specified in this thesis, are influential in determining orientation to physical mobility as measured by the instrument used in this study.

However, orientation to this value area is of particular concern to this study, for no matter what a respondent's orientation to other value areas may be, he must be willing to make at least a partial break with his kin and community if he is to participate in an industrial work situation at all. It is quite possible that a rural youth might not accept this value and yet, as a result of various pressures, be constrained to join the industrial labor force. Such a young person would probably have difficulty in adjusting to his urban-industrial environment. It may well be that many young people from rural areas who fail to adjust to an industrial work situation and return to their native rural environment to eke out a livelihood are those who have not accepted this value. This particular problem remains a subject for future, follow-up, research.

For this study, my main concern is with the proportion of respondents in each category who do accept physical mobility as a positive value and who also accept other work-related values. The results of the analysis directed toward this problem indicate that it is in Category I (non-first-born males) that the greatest proportion of such respondents are found. This leads to the conclusion that young people in this category of respondents are the most adequately prepared, in terms of their orientations to work-related values, for participation in urban industrial work situations. In terms of their orientations to work-related values other respondents may be adequately prepared for participation in the agricultural labor force, rural household industry, or other rural industry, but it is the non-first-born male who appears to be the best prepared for participation in those urban industrial work situations in which most members of the industrial labor force perform their role.

For the remaining two categories of respondents the association of physical mobility and other values follows the order hypothesized on the basis of the original theoretical framework of the thesis. This further indicates that this framework is a fruitful one for the examination of orientations to work-related values.

Limitations of the Study

Sampling

The reader may feel that the nature of the sample used places restrictions upon any attempt to generalize the findings to a larger population. For the purposes of this study I selected a rural community from the central part of the island of Honshu (the main island of Japan) which is close enough to an urban industrial area (Tokyo) to allow the possibility of rural respondents entering the industrial labor force. I selected from this community all students in their final year of compulsory schooling (ninth grade), as it is at this point in their lives that a majority of rural young people enter the industrial labor force of Japan. It is entirely possible that the results of this analysis apply only to young Japanese whose situational characteristics are similar to those in the sample on which this study was based.

Development and test of hypotheses

A possible source of error in the development and test of hypotheses lies in the interpretation of the nexus between statements used in the questionnaire employed in this study and the value areas which they are designed to measure. It may be that the relationship between questionnaire items and values varies

within and between value areas. Further analysis of the content of these items and experimental variation of them in future studies aimed at duplicating the present study should contribute to the clarification of this problem.

In spite of these limitations I feel that this study has demonstrated that a definite association exists between the position of a child in the rural Japanese family and the acceptance of work-related values. Although additional research is needed to clarify some aspects of this association, I feel that the results of this study have a number of implications for social scientists and others concerned with the analysis and understanding of societies other than their own.

In any case, to the degree to which the findings apply in other rural Japanese communities, the dissertation extends and refines our knowledge about the relationship of family roles to the acceptance of work-related values. A commonly held belief is that non-first-born Japanese boys are trained to accept values which are conducive to adequate performance in urban-industrial work roles, the first-born boys being thought to be less so, and girls (regardless of birth order) to be even less so. But it is stretching the truth to say that our previous knowledge was even this specific. Probably many experts simply do not have a clear conception of

the relationship of the various possible combinations of children's sex and birth-order roles to acceptance of such values. This study extends knowledge in that it shows that, while non-first-born males tend to be most accepting of such values, as is sometimes believed, the first-born males and the non-first-born females are both theoretically and empirically about equal in this respect, and the first-born females are the least accepting. This is apparently because the values are more relevant for males than for females and more relevant for non-first-born children than for first-born, and because the influence of sex and birth order are about equal.

It refines knowledge because it shows that not all possible values presumably relevant for urban-industrial work are related to sex and birth order. Those which are so are centered on orientation to work, orientation to change, and orientation to the determination of events.

Finally, the differential acceptance of some value areas under conditions of another such area, orientation to physical mobility, tends to follow the sex and birth-order pattern proposed here.

So it is not always the mere acceptance of such values as independent phenomena which is important: "everybody knows"

that orientation to physical mobility varies according to some pattern of sex and birth order. But in itself this is not true. When considered alone it is not clearly associated with such roles, but in combination with the other areas, it follows the sex and birth-order pattern I predict in this study.

The results of this study also suggest a number of insights into the process of industrialization. In beginning this thesis I noted that Japan has rather rapidly become the most highly industrialized nation of Asia. A necessary part of such industrialization is the adequate socialization of an industrial labor force which, at least in the initial stages of the process of industrialization, must be drawn predominantly from rural areas. Certain aspects of this socialization are obvious, such as the need for training in certain technical skills. Perhaps a little less obvious, but also perhaps just as crucial, is the need for the acceptance of values which will lend support to this participation. I have indicated in this thesis that the teaching of these values in the schools may be a necessary, but may not be a sufficient, condition for preparing children to accept such values. It would appear that any such conscious attempt at the transmission of such values must be supported by social systems other than the system of the school, such as the family, and that this transmission may

be so conducted as to result in selective acceptance of relevant values by children occupying different positions within the family, thus selecting those children whose entry into the industrial labor force is most desired.

APPENDIXES

APPENDIX A

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
TO ITEMS CONSTITUTING VALUE AREA I,
ORIENTATION TO WORK

Item	Category			Chi-square
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females	
<u>Monetary Reward as an Incentive to Work</u>				
1.1	49	52	55	0.16
1.5	18	11	20	2.47
<u>Work as Necessary for a Feeling of Security</u>				
1.2	81	93	92	6.64
<u>Steady Employment and Income</u>				
1.4	85	82	58	11.69
1.6	85	84	80	0.47
1.7	92	87	72	7.50
1.8	58	72	62	3.01
<u>Hierarchical Work Relationships</u>				
1.3	36	34	20	3.11

APPENDIX B

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
(SCALE SCORES 3-4) TO ITEMS CONSTITUTING VALUE
AREA II, ORIENTATION TO STRUCTURED TIME

Category			
I. Non- first-born Males	II. First- born Males and Non- first-born Females	III. First- born Females	Chi-square
62	70	68	0.85

APPENDIX C

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
(SCALE SCORES 3-5) TO ITEMS CONSTITUTING VALUE
AREA III, ORIENTATION TO PHYSICAL MOBILITY

Category			
I. Non- first-born Males	II. First- born Males and Non- first-born Females	III. First- born Females	Chi-square
53	45	40	1.64

APPENDIX D

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
TO ITEMS CONSTITUTING VALUE AREA IV,
ORIENTATION TO CHANGE

Item	Category			Chi-square
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females	
<u>Change</u>				
4.4	28	19	15	2.72
4.5	36	45	15	10.36
<u>That Which Is New</u>				
4.1	94	80	92	7.67
4.3	95	87	82	0.39
4.7	91	80	78	3.57
4.8	60	53	68	2.44
<u>Break with Tradition</u>				
4.2	92	81	88	3.78
4.6	70	68	70	0.12

APPENDIX E

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
TO ITEMS CONSTITUTING VALUE AREA V,
ORIENTATION TO FUTURE
EVENTS

Item	Category			Chi-square
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females	
<hr/>				
<u>Self-determination</u>				
5.1	76	54	72	7.76
5.4	72	66	68	0.45
 <u>Optimism</u>				
5.5	74	68	48	7.30
 <u>Probability of Success</u>				
5.7	91	84	72	6.80
5.8	43	42	45	0.09

APPENDIX F

PERCENT OF RESPONDENTS GIVING POSITIVE RESPONSES
TO ITEMS CONSTITUTING VALUE AREA VI, ORIENTA-
TION TO OCCUPATIONAL AND ECONOMIC
ADVANCEMENT

Item	Category			Chi-square
	I. Non-first-born Males	II. First-born Males and Non-first-born Females	III. First-born Females	
<u>Education</u>				
6.1	58	68	78	3.74
6.3	92	81	85	3.61
6.4	94	86	90	2.63
6.5	77	66	55	5.20
<u>Thrift</u>				
6.2	62	59	55	0.50
6.7	70	80	82	2.54
<u>Hard Work</u>				
6.6	89	87	88	0.46

APPENDIX G

PERCENT OF RESPONDENTS POSITIVELY ORIENTED TO
BOTH PHYSICAL MOBILITY (SCALE SCORES 3-5) AND
TO ITEMS CONSTITUTING VALUE AREA I,
ORIENTATION TO WORK

Category	Item	Per- cent	Chi- square	Phi
<u>Monetary Reward as an Incentive to Work</u>				
I. Non-first-born males . .	1.1	21	3.30	0.25
	1.5	42	0.25	0.07
II. First-born males and non-first-born females .	1.1	23	0.00	0.00
	1.5	41	0.52	0.08
III. First-born females . . .	1.1	15	3.30	0.29
	1.5	25	3.44	0.29
<u>Work as Necessary for a Feeling of Security</u>				
I. Non-first-born males . .	1.2	45	1.51	0.17
II. First-born males and non-first-born females .	1.2	45	2.07	0.16
	1.2	38	0.06	0.05
<u>Steady Employment and Income</u>				
I. Non-first-born males . .	1.4	43	0.38	0.08
	1.6	49	2.93	0.24
	1.7	49	0.01	0.00
	1.8	40	6.59	0.35
II. First-born males and non-first-born females .	1.4	37	0.16	0.04
	1.6	39	0.23	0.05
	1.7	41	1.54	0.14
	1.8	31	0.14	0.04

APPENDIX G (Continued)

Category	Item	Per- cent	Chi- square	Phi
III. First-born females . . .	1.4	25	0.24	0.08
	1.6	38	3.15	0.28
	1.7	28	0.19	0.07
	1.8	25	0.00	0.00

Hierarchical Work Relationships

I. Non-first-born males . .	1.3	17	0.33	0.08
II. First-born males and non-first-born females .	1.3	18	1.38	0.13
III. First-born females . . .	1.3	8	0.02	0.02

Mean Percent

I. Non-first-born males . .	38
II. First-born males and non-first-born females .	34
III. First-born females . . .	25

APPENDIX H

PERCENT OF RESPONDENTS POSITIVELY ORIENTED TO
 BOTH PHYSICAL MOBILITY (SCALE SCORES 3-5) AND
 TO ITEMS CONSTITUTING VALUE AREA II,
 ORIENTATION TO STRUCTURED TIME
 (SCALE SCORES 3-4)

Category	Per- cent	Chi- square	Phi
I. Non-first-born males	34	0.10	0.05
II. First-born males and non- first-born females	29	0.01	0.01
III. First-born females	32	0.01	0.00

APPENDIX I

PERCENT OF RESPONDENTS POSITIVELY ORIENTED TO
BOTH PHYSICAL MOBILITY (SCALE SCORES 3-5) AND
TO ITEMS CONSTITUTING VALUE AREA IV,
ORIENTATION TO CHANGE

Category	Item	Per- cent	Chi- square	Phi
<u>Change</u>				
I. Non-first-born males . .	4.4	13	0.30	0.07
	4.5	24	2.96	0.24
II. First-born males and non-first-born females .	4.4	12	2.58	0.18
	4.5	22	0.45	0.07
III. First-born females . . .	4.4	10	2.10	0.23
	4.5	5	0.13	0.06
<u>That Which Is New</u>				
I. Non-first-born males . .	4.1	51	0.48	0.10
	4.3	40	3.03	0.24
	4.7	45	1.64	0.18
	4.8	43	11.77	0.47
II. First-born males and non-first-born females .	4.1	34	0.60	0.08
	4.3	37	0.51	0.08
	4.7	37	0.40	0.07
	4.8	23	0.07	0.03
III. First-born females . . .	4.1	40	0.68	0.13
	4.3	38	2.34	0.24
	4.7	28	1.17	0.17
	4.8	25	0.30	0.09

APPENDIX I (Continued)

Category	Item	Per- cent	Chi- square	Phi
<u>Break with Tradition</u>				
I. Non-first-born males . .	4.2	47	0.85	0.13
	4.6	34	0.81	0.12
II. First-born males and non-first-born females .	4.2	39	1.42	0.13
	4.6	29	0.21	0.05
III. First-born females . . .	4.2	32	0.95	0.16
	4.6	22	2.40	0.25
<u>Mean Percent</u>				
I. Non-first-born males . .		37		
II. First-born males and non-first-born females .		29		
III. First-born females . . .		25		

APPENDIX J

PERCENT OF RESPONDENTS POSITIVELY ORIENTED TO
BOTH PHYSICAL MOBILITY (SCALE SCORES 3-5) AND
TO ITEMS CONSTITUTING VALUE AREA V,
ORIENTATION TO FUTURE EVENTS

Category	Item	Per- cent	Chi- square	Phi
<u>Self-determination</u>				
I. Non-first-born males . .	5.1	45	3.44	0.25
	5.4	45	5.68	0.33
II. First-born males and non-first-born females .	5.1	20	1.84	0.15
	5.4	36	6.56	0.28
III. First-born females . . .	5.1	32	1.03	0.16
	5.4	30	0.68	0.13
<u>Optimism</u>				
I. Non-first-born males . .	5.5	42	0.77	0.12
II. First-born males and non-first-born females .	5.5	34	2.05	0.16
	5.5	22	0.82	0.14
<u>Probability of Success</u>				
I. Non-first-born males . .	5.7	51	1.34	0.16
	5.8	17	3.16	0.24
II. First-born males and non-first-born females .	5.7	40	0.72	0.09
	5.8	18	0.07	0.03

APPENDIX J (Continued)

Category	Item	Per- cent	Chi- square	Phi
III. First-born females . . .	5.7	28	0.19	0.07
	5.8	15	0.58	0.12
<u>Mean Percent</u>				
I. Non-first-born males . .		40		
II. First-born males and non-first-born females .		30		
III. First-born females . . .		25		

APPENDIX K

PERCENT OF RESPONDENTS POSITIVELY ORIENTED TO
BOTH PHYSICAL MOBILITY (SCALE SCORES 3-5) AND
TO ITEMS CONSTITUTING VALUE AREA VI,
ORIENTATION TO OCCUPATIONAL AND
ECONOMIC ADVANCEMENT

Category	Item	Per- cent	Chi- square	Phi
<u>Education</u>				
I. Non-first-born males . .	6.1	40	6.59	0.35
	6.3	49	0.01	0.00
	6.4	49	0.24	0.07
	6.5	49	8.40	0.39
II. First-born males and non-first-born females .	6.1	28	0.86	0.10
	6.3	31	4.69	0.24
	6.4	39	0.00	0.01
	6.5	32	0.92	0.10
III. First-born females . . .	6.1	32	0.22	0.08
	6.3	32	0.29	0.09
	6.4	35	0.18	0.07
	6.5	20	0.27	0.08
<u>Thrift</u>				
I. Non-first-born males . .	6.2	30	0.36	0.08
	6.7	30	4.40	0.29
II. First-born males and non-first-born females .	6.2	24	0.39	0.07
	6.7	34	0.60	0.08
III. First-born females . . .	6.2	15	3.30	0.29
	6.7	30	1.03	0.16

APPENDIX K (Continued)

Category	Item	Per- cent	Chi- square	Phi
<u>Hard Work</u>				
I. Non-first-born males . .	6.6	49	0.04	0.04
II. First-born males and non-first-born females .	6.6	41	0.98	0.11
III. First-born females . . .	6.6	35	0.00	0.00
<u>Mean Percent</u>				
I. Non-first-born males . .		42		
II. First-born males and non-first-born females .		32		
III. First-born females . . .		28		

APPENDIX L

ITEMS FOR WHICH CATEGORIES OF RESPONDENTS
GAVE SIGNIFICANTLY DIFFERENT RESPONSES
(percent of positive responses)

Item	Non- first-born Males	First-born Males	Non- first-born Females	First-born Females
1.2	81	100	88	92
1.4	85	94	74	58
1.7	92	82	90	72
4.1	94	76	82	92
4.5	36	46	44	15
5.1	76	58	52	72
5.5	74	54	76	48
5.7	91	82	86	72
Mean	79	74	74	65

APPENDIX M

PREVIOUS USE AND EVIDENCE FOR THE VALIDITY
OF THE WORK BELIEFS CHECK LIST

Hodgkins (1961) has used the Work Beliefs Check List in his study of the work value orientations of United States adolescent males. His analysis of the items in the instrument indicates for the most part a high degree of internal consistency, and he concluded that the Work Beliefs Check List had sufficient conceptual validity and internal consistency to warrant its use as an acceptable instrument in his study.

The results of his analysis fail to support his basic hypothesis that, "with socio-economic status controlled, Protestant male adolescents have significantly higher scores on instruments designed to measure work value orientations . . . ," and it is rejected (Hodgkins 1961: 66).

Hodgkins states that there is reason to believe that variables other than those measured might have influenced the subjects' responses. He refers specifically to age, environment, and interdenominational differences as such variables. These results provide no clear information for evaluating the instrument in terms of its predictive validity (Hodgkins 1961: 68).

Watts (1962) has used the Work Beliefs Check List in his study which utilizes samples of adolescent males from Lenawee County, Michigan, Costa Rica, and Lansing, Michigan (the Lansing sample was restricted to boys of Mexican-American descent).

He states that the most immediate implication of the results of the data analysis is the lack of uniformity of results. In this respect he notes that his prediction of a single-factor solution (indicative of unidimensionality) for all three samples was supported only for Value Area III ("Orientation to Physical Mobility"). Only the Lenawee sample showed a relatively consistent trend toward a one-factor solution for all six value areas. Watts suggests that perhaps the Work Beliefs Check List, insofar as it taps a common factor, reflects the value system most prevalent in the Lenawee sample (Watts 1962: 149). In addition to this he notes that "only the Lenawee sample had mean scores which placed them at a position along the hypothetical continuum consistent with predictions" (Watts 1962: 149). These results led Watts to assume that the items of the Work Beliefs Check List are a "less ambiguous indication of the value orientations of the United States than of other cultures" (Watts 1962: 150). He feels that this is particularly true of the instrument as a whole, since only the Lenawee sample showed a relatively consistent

pattern of approaching unidimensionality and predicted mean scores (Watts 1962: 150).

A third source of information concerning the use and validity of the Work Beliefs Check List is "The Occupational Aspiration Scale: Theory, Structure and Correlates," by Archibald O. Haller and Irwin W. Miller. Haller and Miller have used the Work Beliefs Check List in a study of 433 adolescent boys from Lenawee County, Michigan. Scores on the Work Beliefs Check List were correlated with scores on the Occupational Aspiration Scale, an instrument designed to measure level of aspiration. Scores on four of the value areas (Areas II, III, V, and VI) were positively correlated with occupational aspiration scores at the .05 level of significance (Haller and Miller 1963: 98-99). This provides general support for the notion that acceptance of the values which the Work Beliefs Check List is designed to measure is positively associated with level of aspiration in terms of the occupational prestige hierarchy of the United States.

Summary

Previous use of the Work Beliefs Check List indicates that for United States adolescent males the instrument possesses for the most part a high degree of internal consistency. The studies

by Watts and Haller and Miller are most relevant to the present study as they are most directly concerned with industrial situations per se. The study by Watts indicates that youths experiencing the greatest exposure to an industrial milieu indicate the most acceptance of the work-related values which the Work Beliefs Check List is intended to measure. The study by Miller and Haller indicates that youth who have the greatest acceptance of these work-related values aspire to higher levels in the industrial occupational prestige structure of the United States. Both of these studies provide support for the validity of the instrument through these indications of the relationship between industrial situations and Work Beliefs Check List scores intended to be indicative of the acceptance of work-related values. Even in these studies, however, the argument for validity is indirect, being based on the ability of the instrument to yield, though not always, expected relationships. No direct evidences are available. More important, establishing validity outside of Japan does not guarantee it within that country. For evidence regarding the latter see Chapter IV of this work.

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