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ABSTRACT

The major task of this report is to describe and evaluate the participation and status achievements of Orientals in the labor market, with particular attention to factors affecting such participation and whether differences in participation as compared to that of whites reflect discrimination. Inequalities and discrimination are examined in terms of labor force participation, occupational achievement, occupational mobility, and earnings. A brief resume of Oriental immigration is followed by descriptions of settlement patterns and socioeconomic characteristics. Differences in participation between whites and Orientals are examined and the relationship of participation to sociodemographic determinants are investigated. Levels of occupational status reached by Oriental workers in the U.S. are described and documented and the dynamics of the occupational structure, conditions influencing mobility, and the consequences of these for achievement are examined. Earnings from wages and salaries in 1969 serve as a measure in the differential analysis of income. A final chapter presents a brief profile of the status achievements of Orientals and a discussion of the implications of contemporary oriental achievement. Appendixes include descriptions of three measures used, occupation scores and frequencies, a description of the sample, and ideas for further research. (Author/NJ)

ORIENTALS IN THE AMERICAN LABOR MARKET

Minorities in the Labor Market

VOLUME II
1975

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16. Abstracts

Persons of Oriental descent in the United States generally compare favorably with whites in their labor force participation, employment, occupational achievement, job mobility and earnings. Evidence from the 1970 census indicates that; (1) the status of Japanese and Chinese men and women is very much like that of white men and women, (2) Filipino men rank well below white men, but Filipino women tend to outrank white and all other women, (3) Korean men have achieved the highest occupational levels and earnings in the U.S., a record not matched by Korean women. These generally high levels of accomplishment are attributable to the educational attainment of the "new generation" of Orientals. Nevertheless, sex inequalities are prominent, with the earnings of Oriental men about double those for Oriental women.

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PREFACE

Equality of opportunity has become more than an ideal in the United States. It is now an important part of social policy, and includes opportunities for active participation in the labor market. Employment represents an important segment of the lives of most people in America, as in most industrialized societies. In principle, employment status, occupational achievement, mobility and earnings should be based primarily on ability and competence. Differences in achievement because of color, ethnicity or sex are not consistent with the concept of equal opportunity. Yet inequalities and discrimination have not been eliminated. Therefore, the question of the extent to which color, ethnic and sex characteristics advance or impede employment and career chances is a very special and timely theoretical and policy issue. Based on a large national sample, this report provides an analysis of differences in participation and achievement between color-ethnic minorities and whites and also between men and women.

This research has evolved since its beginning in the fall of 1973 when the plan was to concentrate on the participation and achievement of Spanish origin persons. For comparative purposes, it was immediately obvious that not only whites but black too should be included in the study population. American Indians and Orientals were subsequently added, since the focus was on discrimination and since census data files contained the necessary information.

Findings are presented in two volumes: Volume I, Spanish Americans and Indians in the Labor Market, and Volume II, Orientals in the American Labor Market. This may be the first study to cover as many as ten distinctive color-ethnic groups in the labor market, particularly in the kind of detail provided in these two volumes. We do not take special pride in this. Rather it is a tribute to unnamed persons in the U.S. Bureau of the Census who had the foresight and capability to make such information available on computer tapes. To their credit, it is now possible to see answers to questions which heretofore were unanswerable because of the lack of adequate data.

This two volume report is a collaborative effort in which the authors worked together closely and sometimes plagiarized ideas from one another. In the daily business of research, there was much discussion about questions and interpretations of particular aspects of the investigation. As indicated by suggestions for further research in Appendix D, discussions often turned to alternative directions this line of research might take in order to more nearly answer a question.

We are indebted, of course, to a number of people who in various ways and in connection with various aspects of this research made invaluable contributions. We are particularly indebted to Dr. Walter Postle and Robert Healy. Dr. Postle, Regional Economist, U.S. Department of Labor, Manpower Administration, Region IX, was instrumental in making arrangements for most of the early phases of the data processing. Bob Healy, Lawrence Berkeley Laboratories, very meticulously developed computer programs, prepared table formats and executed computer runs. In the earliest of the planning phases, Dr. Thomas R. Panko provided advice and counsel regarding occupational classifications and scaling. Rosemary Waters single-handedly typed several drafts of text and tables while maintaining some semblance of order among the authors.

GLW
DEJ
RJH
ACdF

NOTATIONS AND ABBREVIATIONS

PUS	Public Use Sample
LFP	Labor force participation
LFPR	Labor force participation rate
NILF	Not in labor force
ER	Employment rate
UR	Unemployment rate
HOH	Head of household
CEB	Children ever born
OCC70	Occupation score, 1970
OCC65	Occupation score, 1965
D	Index of dissimilarity
RMS	Relative mobility score
PC...	Abbreviated footnote format for designating published data from the 1970 census. For example, PC(2)-1C refers to:

U.S. Bureau of the Census
Census of the Population: 1970
Subject Reports
Final Report PC(2)-1C
Persons of Spanish Origin

---	Estimated values not shown because of small frequencies in PUS samples. The basic rule was to calculate averages, rates and percentages with base frequencies of at least 20.

CONTENTS

CHAPTER 1

THE PROBLEM, DATA AND MEASURES

This study is aimed at understanding differences in achievements of minorities in the labor market. The national goal of equal employment opportunities for all regardless of color, sex, age or national origin has yet to be fully realized. Since a number of programs have been designed and activated to help accomplish this goal, it is important to assess the extent to which participation, achievement and mobility in the labor market have become equal. Only recently has there been data at the national level which would permit detailed assessments of American Indians, Mexicans, Puerto Ricans and Cubans, or of Japanese, Chinese, Filipinos and Koreans. While there is considerable information about the labor market activity of some minorities, especially blacks, almost no information has been available for others. Even for black workers, however, relatively little is known about certain aspects of their involvement in the labor market, especially their occupational mobility. Moreover, the relatively recent surge of interest in the welfare of women has not been matched by comprehensive information on the achievements of women, many of whom are doubly disadvantaged by their sex and color or ethnic origin.

Results of this study are presented in two volumes: Volume I, Spanish Americans and Indians in the Labor Market, and Volume II, Orientals in the American Labor Market. This division of labor is dictated by three general considerations. First, Spanish, Indians and blacks are generally among the most disadvantaged, whereas Orientals have been relatively successful in matching the accomplishments of the white majority in recent years. Second, the several populations with roughly comparable heritage are treated together. Mexicans, Puerto Ricans and Cubans have in common a Spanish heritage, just as Japanese, Chinese, Filipinos and Koreans have an Oriental heritage, although there are many specific differences among these groups. American Indians, of course, differ from all other American minorities in their experiences through history. They are treated in this analysis with the more disadvantaged groups. Third, the sheer detail of information encourages some separation of the findings. Both volumes provide comparative data for whites who, as a majority group, represent a benchmark. Volume I also contains detailed comparable data for blacks as the largest single color minority, although the study was not designed initially to concentrate on blacks.

OBJECTIVES

The major task in this report is to describe and evaluate the participation and status achievements of Orientals in the labor market, with particular attention to factors affecting such participation and whether differences in their participation as compared with that of whites reflect discrimination. By 1970, the labor market achievements of Orientals in the United States hardly qualified them as oppressed peoples. In earlier days, however, Chinese, Japanese and Filipinos were often objects of harsh and discriminatory treatment. Their more recent successes should provide clues to the more general questions of why and how distinctive minorities attain high status in the United States. Despite their apparent success, the possibility still exists that discrimination against Orientals continues, and it is this possibility that constitutes a major focus throughout this study.

Within the labor market context, inequalities and discrimination will be examined in terms of four major areas: (1) labor force participation, (2) occupational achievement, (3) occupational mobility, and (4) earnings from wages and salaries. Differences in achievement between Orientals and whites as well as among Orientals may be attributed to differences in personal background factors, such as age, sex, education and vocational training, which are typically antecedent to entrance into the job market. Differences also may result from factors which do not necessarily antedate employment, such as marriage, fertility, size of family or health.

THE SAMPLE DATA

The basic information for this study was derived from the Public Use Sample (PUS) files from the United States census for 1970. These files represent records from the 1970 census sample questionnaires. Each of six primary PUS's constitutes a one-percent sample and each is self-weighting, which means that a person included in a one-percent sample can be assigned a weight of 100 to obtain an estimate of the frequency of a particular characteristic for the entire population. Since the PUS's contain a number of questions in common, it is possible to combine all six to obtain a national sample as large as 6% for some purposes.

Variations in the size of the sample populations in this study result not only from differences in the size of the base populations but also from differences in the sampling fraction for different phases of the study. In general, the largest possible sample (6%) was designated for Orientals,

since their numbers in the U.S. are relatively small. It was necessary, however, to employ a three percent sample of Orientals for the analysis of occupational mobility, because the census items on employment in 1965 and 1970 were included in only half of the six PUS's. A two percent sample of whites was ample for all comparable analyses.

The actual selection of persons to be included in the study was based on several considerations. A primary objective in designating sample populations for the labor force participation phase of the study was to include all persons who were actual or potential members of the labor force. Only those employed or with earnings were identified for later phases of the analysis. The total samples therefore include all persons 14 to 69 years of age in 1970 who were not residents of institutions nor enrolled in school. The age range was considered broad enough to include persons most likely, by age alone, to be actual or potential participants in the labor market. Institutional and student populations were excluded on the grounds that they involve special circumstances, the effects of which might confound the resulting observations about labor market behavior. Persons living in group quarters or institutions included those living in such diverse places as correctional institutions, mental hospitals, homes for the aged and dependent, homes for the physically handicapped, rooming and boarding houses, military installations and college dormitories. The labor market activity of such persons is likely to differ from those not living in institutions. Similarly, students are unlike nonstudents in a number of ways, although many students are also in the labor force. By exclusion of institutional and student populations, then, the sample populations are made more homogeneous.

Japanese, Chinese, Filipinos, Koreans and whites are identified by the race codes in the census data. Spanish origin persons were separately identified and subtracted from the white sample. The final selection resulted in the following samples:

	Male	Female
Japanese (6%)	8,376	11,747
Chinese (6%)	6,537	6,456
Filipino (6%)	4,832	4,839
Korean (6%)	761	1,489
White (2%)	883,838	1,018,059

INEQUALITY, SEGREGATION AND DISCRIMINATION

Conceptualization and measurement of discrimination pose difficult problems despite the voluminous literature on discrimination. There is

little argument that either blacks or women have been subject to discrimination in the labor market. On the other hand, there have been few attempts to measure the degree to which such discrimination exists (Blalock, 1967:10). Part of the difficulty in defining discrimination can be attributed to the failure to distinguish between the process of discriminating and the results of this process. Furthermore, discrimination is often conceived as "unequal treatment of equals" without fully specifying "equal with respect to what." Presumably, minority members are treated unequally because of their minority characteristics rather than because of other traits. However, the identification of factors relevant to equal (or unequal) treatment in the labor market is essential for any consideration of equality and discrimination.

Discrimination is defined for purposes of this study as (1) an effect or resultant condition of discriminatory processes, (2) represented by inequality in the labor market among persons equally well qualified for (3) achievement in the labor market. This conceptualization of discrimination has several important implications. First, it is developed partly in anticipation of the census data used in this study, which are better suited to an investigation of discrimination as a product than as a process. Second, the focus of attention is clarified by specifying which aspects of discrimination will be examined. Emphasis on the effects of discrimination does not imply,of course, that behavior involved in the process of discrimination is unimportant. Third, discrimination is regarded as unequal achievement among equals, where "equal" is defined on the basis of factors relevant to participation and achievement in the labor market. In general, these factors include the acquisition of experiences and skills important (a) to obtaining employment, (b) to attaining an occupational level consistent with personal qualifications, (c) to advancing in the occupational structure on the basis of ability, and (d) to earnings commensurate with skills and level of occupational achievement. In a negative sense, relevant factors imply the absence of constraints or disabilities which, if present, would serve to limit participation and achievement. Fourth, equality is treated as a status equivalent, i.e., persons occupying the same position in the social structure or in the labor market are viewed as equal in status.

Whether by accident or intent, equally well-qualified persons must be treated unequally in order for discrimination to result. What constitutes being qualified for achievement in the job market is typically rather elusive. Here we distinguish three types of factors which influence the participation of individuals in the job market: skill factors, or those things that help prepare people for entrance into and achievement in the labor market; non-skill factors, or personal characteristics, which may affect chances of getting a job but which do not directly involve job skills; and situational factors, such as residential location, the demand for workers or transportation facilities. Among the many forces that determine the nature and extent of labor market participation, this study is concerned with the first two types of influences. These may be considered as primary and secondary, depending on whether they bear directly or indirectly on individual work

skills and employment. Education, job training, and health for example, are primary factors in that they have to do with preparation and readiness for work. Marital status, fertility and size of family are secondary, since they have a less direct though nevertheless important bearing on work skills and potential. As a resultant condition, discrimination implies that barriers have been imposed which effectively prevent minorities from reaching their full potential in the labor market.

MEASURES

Three kinds of measures are necessary to operationalize the concepts discussed so far: equal qualifications, participation and achievement, and discrimination.

As an indicator of level of educational achievement, years of school completed is a conventional measure, and those with similar levels of attainment are often regarded as equally well equipped for work achievement. Numerous studies have consistently found positive relationships between years of school completed and "success" in the job market. Nevertheless, formal schooling is a rather crude measure of either educational attainment or of preparation for work. Two major assumptions may be questioned. First, there is the assumption that equivalence in years of school completed means equivalence in education attainment. This assumption may be challenged on the grounds of differences in the quality of teaching, educational facilities and curricula sometimes within the same school as well as between schools, school systems, communities and regions. The fact that two people have completed twelve years of school does not guarantee that they have attained the same educational level. It may be noted also that twelve years of schooling does not necessarily indicate twice as much education as the completion of six years. Second, the assumption that equivalence in educational level means being equally well prepared for participation and success in the job market may be challenged for some of the same reasons plus the lack of vocational preparation for many students. However, it is not totally unreasonable to assume that, on the average, persons with similar levels of schooling are similarly qualified.

As a complementary indicator of qualification for achievement, job training bears more directly on the development of work skills than does education. Job training programs are relatively short-term experiences for more specific purposes than formal schooling. The quality as well as the specific content of training programs are not identical any more than schools are identical. But since job training is so directly related

to the development of work skills, intergroup differences in participation in job training may be interpreted as differences in preparation for work.

Health, or conversely disability, is a further indicator of preparation and readiness for work. Unlike education and training, health does not involve the development of work skills, but a disability can serve to limit participation in the labor market. Certain kinds of physical or mental disabilities can severely restrict, even preclude, entrance into or full participation in the labor market. While there is no suitable information for ascertaining degrees of health, census data make it possible to distinguish between certain aspects of "poor health," as indicated by the duration of an illness or disability.

In short, equally well qualified persons will be identified on the basis of their educational attainment, job training and health. The expectation, of course, should be that equally well qualified persons will on the average do equally well in the labor market. The net result of conceptual, technical and practical problems requires cautious interpretations with appropriate qualifications because of less than perfect data and measures which depend heavily on underlying assumptions.

Measurement of participation and achievement in the labor market is easier in some respects than determining equal qualifications for achievement. In part this is true because there are a number of conventional measures for labor force participation (labor force participation rates, employment and unemployment rates, and weeks and hours worked) and for income (median earnings from wages and salary). However, standards for determining levels of occupational achievement and measuring the several components of occupational mobility are far less conventional and less widely accepted. Census occupational categories have been employed for many years with only relatively minor modifications from time to time, but unfortunately there is no inherent ranking of occupational categories. In order to distinguish levels of occupational achievement, it is necessary to construct an index capable of ordering occupational categories from high to low. This procedure has been accomplished for this study, as will subsequently be described more fully.

Measurement of occupational mobility presented the most difficult of the measurement tasks in this investigation, because of the very complexity of mobility itself and because relatively little progress has been made toward developing adequate mobility measures. Not only can mobility be characterized by its incidence, but also by distance and direction of movement between occupational origins and destinations. Given an occupational scale, such as that constructed for this study, direction of movement is easily determinable. But measuring mobility distance is far more complicated. For other than purely descriptive purposes, the difference between occupation scores at two points in time is an unsuitable measure of distance. Since the difference in occupation scores is a function

of both origin and destination levels, the difference in scores confuses causes with effects.

No single or simple measure adequately assesses discrimination. Moreover, discrimination may be found at either some or all stages of individual participation in the job market. In general, the strategy for determining the presence of discrimination in this study will be to compare persons defined as equal in one or more respects--other than color, ethnicity or sex--to determine whether or not their participation and achievement in the labor market is also equal. The presence of discrepancies can then be interpreted as discrimination. This strategy can be illustrated briefly. Orientals and whites with twelve years of school completed may be assumed to be equally well qualified as far as educational attainment is concerned. Therefore, if Filipinos, for example, were found to have lower employment rates, lower occupation scores, a lower incidence of upward occupational mobility and lower average earnings than whites, it would be quite evident that among high school graduates Filipinos were subject to discrimination in comparison with whites. It is not expected that actual patterns will be as neat and clear as in this hypothetical illustration, and it may well be that one group sometimes ranks higher and sometimes lower than other groups.

One specific measure, applied intermittently throughout the analysis, can sometimes be interpreted as a measure of discrimination. This is the index of dissimilarity, D, which basically measures the unevenness in a pair of percentage distributions. The D-index can serve as an indicator of discrimination where, for example, the occupational distributions of two groups of high school graduates are under examination. Since each group has the same educational level, their occupational distributions should be very similar and any noticeable difference reflected by the D-index suggests the possibility of discrimination. However, as noted at appropriate points later in the discussion, unless two groups are equally qualified, the dissimilarity index probably measures something besides discrimination.

The ensuing discussion is organized in both a logical and functional sense. We begin with questions of labor force participation, which are followed by the topics of occupational achievement, occupational mobility and earnings from wages and salaries. Earnings are directly dependent on the kind of occupation a person has attained and perhaps also on movement between jobs in the recent past. Occupational achievement must, of course, be preceded by active participation in the labor market. Hence, there are a series of stages leading to the outcome of earnings from an occupation. Inequalities or discrimination can occur at one or more of these stages and discrimination at prior stages can exert significant influences on subsequent stages. For this reason the analysis proceeds from the point of "getting into the labor market" to comparisons of levels of earnings.

CHAPTER 2

ORIENTALS IN THE UNITED STATES

Orientals constitute less than 1% of the population in the United States, although the importance of their presence in the past and at the present time far outweigh their numbers. Japanese, Chinese, Filipinos and Koreans are the most numerous Orientals in this country. In 1970, there were nearly 600,000 Japanese, over 430,000 Chinese, 338,000 Filipinos and 70,000 Koreans (Table 2.01). Major changes have occurred in immigration policies and employment within the past generation and the typical Oriental American now is much different than the earlier Chinese and Japanese immigrants.

This discussion begins with a brief resume of Oriental immigration followed by descriptions of their settlement patterns and their socioeconomic characteristics. A much fuller treatment of the background of Chinese Americans is provided by Lyman (1974) and for the Japanese by Petersen (1971).

IMMIGRATION AND POPULATION GROWTH[1]

As with immigrants from many countires, Orientals came to the United States in successive waves, with the Chinese being the first to arrive in substantial numbers in the 1870's. Thirty years later immigrants from the Orient were primarily Japanese. Filipinos did not arrive in number until after World War I, and Koreans after World War II. As a result of differences in the timing of immigration and prevailing conditions at the time of entry, each of the Orientals population has undergone somewhat different experiences.

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[1]This section draws heavily from material in the following publications: Monica Boyd, "Oriental Immigration: The Experience of the Chinese, Japanese, and Filipino Population in the United States," International Migration Review, Vol. V (Spring, 1971), pp. 48-61; Historical Statistics of the United States: Colonial Times to 1957; Statistical Abstract of the United States, 1967; Annual Report of the U.S. Immigration and Naturalization Service, 1973; and Statistical Abstract of the United States, 1972.

Table 2.01. Orientals in the United States, by Regions, 1970
(numbers in 000's)

Region	Japanese		Chinese		Filipino		Korean	
	Number	%	Number	%	Number	%	Number	%
United States	588	100.0	432	100.0	337	100.0	70	100.0
Northeast	39	6.7	115	26.7	30	9.0	14	19.8
North Central	43	7.3	38	8.8	27	8.1	13	19.0
South	28	4.8	32	7.5	29	8.7	12	17.0
West	478	81.2	246	57.0	250	74.2	31	44.2

PC(2)-1G, Tables 1, 16 and 31; PC(1)-D1, Table 270.

Chinese Immigration

The first major immigration of Orientals to the United States took place during the 1850's, when 36,000 Chinese were recruited to work as laborers in the gold mines of California and to help in the construction of railroads. In response to the demand for labor, the influx of Chinese continued through the decade of the 1880's, reaching a peak of 133,000 during the 1870's (Table 2.02). Comparatively few Chinese were admitted to the United States from 1890 to 1964. Since 1965,however, there has been a resurgence of immigration. Nearly 80,000 Chinese immigrants came during the last half of the 1960's.

While the recruitment of Chinese laborers helped to meet the need for cheap labor as the nation expanded westward, their presence met with strong opposition as they were regarded as threats to jobs and wages of white workers. Anti-Chinese sentiment became widespread and pressures from many sources, including organized labor, led to the Chinese Exlusion Act in 1882, which drastically reduced the number of immigrants by barring the entrance of unskilled Chinese workers. This initial exclusionary policy was followed by a series of prohibitive pieces of legislation, all of which had the effect of discouraging and curtailing Chinese immigration. In the midst of World War II, a token quota of 100 Chinese immigrants annually was established. However, not until the legislation of 1965 repealed the entire system of quotas based on national origins was there a significant number of Chinese immigrants.

Japanese Immigration

Japanese migrants first came in numbers to Hawaii during the 1890's to work in sugar refineries, and during the first decade of the twentieth century about 140,000 came to the continental United States to work on farms and railroads. The literacy level of Japanese immigrants to the mainland was high, as indicated by a survey in 1911 which found that 98% of the men could read and write Japanese (Petersen, 1971:14). Following the Gentlemen's Agreement in 1907 which severely restricted the issuance of passports in Japan, the number of Japanese immigrants decreased steadily until after World War II. Since 1950 the number of Japanese immigrants has been nearly as large as the number of Chinese coming to the United States.

Filipino Immigration

Filipinos are relative newcomers when compared with their Chinese and Japanese neighbors. Filipinos came in substantial numbers during the 1920's where, like their predecessors, they worked as laborers on farms and ranches and, in addition, took jobs as waiters, elevator operators, hotel attendants and in similar manual occupations. Many of the early Filipino

Table 2.02. Chinese and Japanese Immigrants to the United States, 1850 to 1970 (in 000's)

Year	Chinese	Japanese
1850-1859	36	---
1860-1869	54	---
1870-1879	133	---
1880-1889	68	2
1890-1899	15	14
1900-1909	20	140
1910-1919	21	77
1920-1929	31	42
1930-1939	6	3
1940-1949	16	2
1950-1959	10	41
1960-1964	8	22
1965-1970	80	22

Source: Historical Statistics of the United States: 1789-1945, Table 304; Statistical Abstract of the United States, 1967; and Annual Report of U.S. Immigration and Naturalization Service, Dept. of Justice, 1973.

immigrants came from Hawaii, where they had earlier worked as laborers on sugar and pineapple plantations, and settled in California. In 1930, there were more than 30,000 Filipinos in California, a vast majority of whom were males. Unlike their Oriental predecessors, Filipinos had not been subjected to any direct legislation restricting their immigration. Filipinos were American nationals prior to 1935 and, thus, were not subject to quota restrictions. The annual influx has resulted in substantial growth in the Filipino population since 1965.

	1965	1966	1967	1968	1969	1970
Filipino immigrants	3,130	6,093	10,865	16,731	20,744	31,203

Korean Immigration

Available evidence indicates that the number of Korean immigrants has been increasing since World War II, when prohibitions against Orientals were relaxed to allow returning veterans to bring wives from Korea. Between 1951 and 1960, more than 6,000 Koreans entered the country, and this figure rose to more than 34,000 during the 1961-1970 period. Thus, like the Filipinos, Koreans are increasing rapidly as part of the Oriental population in the U.S.

Oriental American Population Growth

The largest increases in Oriental Americans have taken place since the end of World War II. During the earlier years of immigration, many Chinese and Japanese returned to their homelands. Between 1900 and 1920, the Chinese population in the United States decreased from 90,000 to 62,000. With the exceptions of the depression decade and the war years, the Japanese population has increased rather steadily (Table 2.03), and has been the largest of the Oriental populations since 1920. Filipinos, the third largest of the Oriental populations in this country, have grown primarily since the 1940's. During the 1960's the Filipino American population grew from 176,000 to 337,000, an increase of about 95% for the decade. Koreans have arrived so recently that it is premature to consider their growth trend, although under present conditions their numbers in the United States can be expected to increase.

Growth of the Oriental American population has progressed with varying degrees of responsiveness to migration, births and deaths. The Japanese increased during the 1960's primarily as a result of natural increase rather than through immigration. A large majority of Japanese Americans in 1970 (79%) were native born Americans. Recent growth of the Chinese population in this country is more nearly a result of immigration; only 53% were native born in 1970. Growth of the Filipino and Korean

Table 2.03. Chinese and Japanese Populations in the United States: 1900 to 1970 (Population in 000's)

Year	Chinese	Japanese
1900	90	24
1910	72	72
1920	62	111
1930	75	139
1940	78	127
1950	118	142
1960	237	464
1970	435	591

populations has been even more dependent on immigration. In 1970, 53% of the Filipinos and 54% of the Koreans were foreign born.

ORIENTAL SETTLEMENT

Like many ethnic groups in the United States, the settlement patterns of Orientals favor specific regions, states, and cities. For the most part, Orientals are concentrated in the West, particularly in the Pacific States of Hawaii and California (Tables 2.01 and 2.04). In Hawaii, Japanese, Chinese, and Filipinos number about 363,000 and constitute almost half of the islands' population. In California, some 520,000 are of Japanese, Chinese, or Filipino descent, and represent over 2% of California's total. A number of Orientals, Chinese in particular, have also settled in the Northeast. The State of New York has about 82,000 Chinese, 14,000 Filipinos, and 20,000 Japanese. Relatively few Orientals live in the South and North Central regions, but even here the patterns of settlement are fairly selective. In the North Central region, Illinois accounts for most of Japanese, Chinese, and Filipino residents (44,000). In the South, the heaviest concentrations of Chinese and Japanese are in Texas. In contrast, Filipinos in the South are mostly concentrated in Virginia, where more than 7,000 have now established domiciles.

The population distribution of Koreans is similar to the patterns observed for the three larger Oriental groups. The biggest concentration of Koreans is in the West (44%), but the rest of the Korean population is somewhat evenly distributed among the three remaining regions.

Furthermore, Orientals in the United States are predominantly urban dwellers. Almost all Chinese (97%) live in urban areas, while Japanese (89%) and Filipinos (86%) are also primarily urban.

AGE AND SEX

With the exception of the Japanese, Orientals are somewhat younger than average in the United States. The median ages of Chinese, Filipinos, and Koreans range between 26.2 and 26.8 as compared to 28.1 for the national median in 1970. In addition, Chinese and Filipino men are about two to four years older than their female counterparts. For the Korean population, males and females are about the same in their median ages. The Japanese median age of 34.3 is six years older than the national average.

Sex ratios--the number of males per hundred females--vary among the Orientals. Japanese and Koreans are predominantly female. For

Table 2.04. Japanese, Chinese, and Filipinos by States in the Four Major Regions of the U.S., 1970

Region and state	Japanese	Chinese	Filipino
Northeast			
New York	19,794	81,903	14,045
New Jersey	6,344	8,755	---- [a]
Massachusetts	---- [a]	14,018	---- [a]
Pennsylvania	---- [a]	7,097	---- [a]
Northcentral			
Illinois	17,645	14,077	12,355
Michigan	---- [a]	6,611	---- [a]
South			
Texas	6,216	8,083	---- [a]
Virginia	---- [a]	---- [a]	7,218
West			
Hawaii	217,175	52,583	95,680
California	213,277	170,419	135,248
Washington	20,188	9,376	11,488
Oregon	6,213	---- [a]	---- [a]
Colorado	7,861	---- [a]	---- [a]

[a]Population less than 6,000.

Source: PC(2)-1G, Tables 1, 16, and 31.

the Japanese population there are 86 males and for the Koreans 68 males per hundred of their respective female populations. The preponderance of women in these two populations partly reflects the number of war brides brought to the United States by returning servicemen. Chinese and Filipinos are predominantly male. The sex ratios of Chinese and Filipinos are 111 and 119, respectively. The higher proportions of males in the Chinese and Filipino populations, particularly the later, are largely the result of past immigration of male laborers into Hawaii and to the mainland.

EDUCATIONAL ATTAINMENT

Orientals are among the most educated members of American society. Orientals average higher levels of education than whites (Table 2.05). The median years of school completed for the four Oriental populations in 1970 ranges between 12.9, represented by the Koreans, and 12.2 for the Filipinos, whereas the comparative figure for whites is 12.1. However, Chinese and Filipinos have comparatively high proportions without formal schooling. About one out of every four Filipinos, whites, or Chinese has obtained an elementary education, while about one out of six Koreans or Japanese has attained similar educational level. More than half of all whites and Japanese had one-to-four years of education beyond elementary school in 1970. The remaining Oriental populations have about a third of their members with similar levels of high school. The greatest educational concentration of Koreans, Chinese, and Filipinos is at the college level. The proportion of Koreans with at least one year of college approaches 50%. Chinese and Filipinos each register about 35% of their populations with college education. Considerably lower are the figures for whites (22.4%) and Japanese (29.5%) who reach the college level.

The above figures reflect the rising levels of educational attainment in this country. In 1940, Japanese men averaged about 9 years of schooling, but by 1950 this figure had climbed to more than 12 years. For white, Chinese, and Filipino men, the 1940 and 1950 figures were as follows: whites, 8.1 and 9.3; Chinese, 5.6 and 7.0; and Filipinos, 7.4 and 7.3. The slight decline in educational attainment for Filipino men has been attributed to the influx of immigrants with low levels of education during the period (Schmid and Nobbe, 1965). By 1960, all groups experienced further increases in their levels of education. In view of their already high education in 1950, the improvement in education for Japanese men during the following decade was minimal, but they still reached a median education of 12.5 years in 1960. For other men, median years of completed schooling in 1960 were as follows: whites, 10.7; Chinese 9.2; and Filipinos, 8.8.

Table 2.05. Persons 25 Years of Age and Over, by Education, 1970

Years of school completed	Japanese	Chinese	Filipino	Korean	White
All	100.0	100.0	100.0	100.0	100.0
None	1.8	11.1	5.6	2.8	1.4
Elem. 1-8	17.2	21.4	26.2	16.4	25.2
High School 1-4	51.5	30.9	33.3	32.3	51.0
College 1 or more	29.5	36.6	34.9	48.5	22.4
Median	12.5	12.4	12.2	12.9	12.1

PC(1)-D1, Table 199; PC(2)-1G, Tables 3, 18 and 33.

Basically similar to the pattern for men, the trend in educational attainment for women between 1940 and 1950 was one of continuing improvement. In 1940, Japanese, white, Filipino, and Chinese women achieved median years of education of 8.6, 8.5, 7.8, and 5.0, respectively. In 1950, these respective figures rose notably to 12.2, 10.0, 9.1, and 8.5, and underscored the greater gains in education among Japanese and Chinese over other women experiencing similar increases in median education during the same period.

By 1960, increases in years of completed schooling were relatively high for women who had previously been at the lower end of the educational scale during the preceding decade. The median education of Filipino women in 1960 reached 12.2, almost equalling the median of Japanese women of 12.4, and surpassing white women by a full year. Chinese women with 10.7 years of median education in 1960 also showed marked gains in education, surpassing their 1950 level by two years.

Differences in median years of schooling among Orientals and whites of both sexes have virtually disappeared in recent years. As already noted in Table 2.05, all population groups indicated a median level of schooling of about 12 years in 1970.

The rather rapid rise in educational attainment among Oriental men and women in recent decades has been attributed to several factors. Prominent among these are: (a) the strong emphasis on educational success (Kitano, 1969; Lyman, 1974; Petersen, 1971),(b) cultural "orientations relating to 'collective' rather than 'individual' action and to generation-based linear authority" that are conducive to high scholastic achievement especially among Japanese (Schwartz, 1971), and (c) selective immigration of persons with such positive attributes as high education and occupation particularly among Chinese and presumably among Filipino women (North, 1974).

OCCUPATIONAL COMPOSITION

The occupational distributions of Orientals and whites between 1940 and 1960 showed patterns of increasing concentration at the upper rungs of the occupational ladder (Table 2.06). Shifts have been mainly to white collar from blue collar and farm occupations. In 1960, Japanese men had the largest percentage of workers in the white-collar occupations (56%), followed by Chinese men (51%) and white men (42%). The proportion of white-collar workers for Filipino men in 1960 was the lowest (26%). More so for Oriental than white men, increases in white-collar employment especially between 1950 and 1960 were most evident in the professional and technical occupations.

Table 2.06. Occupational Distributions of Employed Men, Ages 14 Years and Over, by Race: 1960, 1950, 1940

Occupation	White			Japanese			Chinese			Filipino		
	1960	1950	1940	1960	1950	1940	1960	1950	1940	1960	1950	1940
White Collar[a]	42.1	39.2	39.1	56.0	36.2	44.5	50.7	41.5	35.3	25.7	11.9	9.2
Professional	12.5	9.3	7.6	26.1	9.6	5.4	20.3	6.6	2.5	13.3	3.1	3.0
Managerial	13.1	13.7	13.6	13.0	12.9	23.0	16.8	23.2	22.3	3.1	2.9	2.3
Clerican & Sales	16.5	16.2	17.9	16.9	13.7	16.1	13.6	11.7	10.5	9.3	5.9	3.9
Manual[a]	57.9	60.9	61.0	44.0	63.9	55.5	49.3	58.4	64.7	74.4	88.1	90.7
Crafts	23.3	23.3	20.1	15.3	11.5	4.8	5.1	3.5	1.4	9.9	8.1	2.3
Operatives	22.2	23.6	24.3	13.1	14.6	12.2	14.2	17.1	23.1	17.6	18.0	11.1
Service	6.0	6.2	6.9	8.3	17.6	19.2	28.5	35.8	38.4	39.7	56.4	70.0
Laborers	6.4	7.8	9.7	7.3	20.2	19.3	1.5	2.0	1.8	7.2	5.6	7.3
Farm[b]	8.3	14.5	21.3	25.7	32.5	43.1	1.3	2.9	4.2	23.8	43.1	49.4
Farmers	5.9	10.2	14.2	18.0	15.5	18.6	.8	1.4	1.4	2.9	5.4	1.6
Farm Laborers	2.4	4.3	7.1	7.7	17.0	24.5	.5	1.5	2.9	20.9	37.2	47.8

Source: Calvin F. Schmid and Charles E. Nobbe, "Socioeconomic Differentials Among Nonwhite Races", American Sociological Review, Table 3, 1965.

[a]Base on which percentages for "white collar" and "manual" workers were computed excludes "Farm" category.

[b]Base includes total employed civilian labor force.

All groups contained smaller proportions of farm workers in 1960 than in 1950, and much less than in 1940. However, despite the continued and steady decline in farm employment, Filipino and Japanese men had noticeably high proportions engaged in farming activities in 1960--26% and 24%, respectively. In contrast, only about 8% of the white and less than 2% of the Chinese worked in agriculture in 1960.

The proportions of Oriental and white workers in manual occupations were lower in 1960 than in 1940. The percentages of service workers and laborers declined, especially for Oriental workers, while the proportions of craftsmen, foremen and operatives showed increases except for white and Chinese operatives.

Similar patterns in the occupational composition of Orientals and whites have been observed in recent years. As will be seen in their 1970 occupational distributions presented in Chapter 4, Oriental and white men have high proportions of white-collar workers particularly in the professional and technical ranks with proportionate declines in farm related jobs. Manual workers continue to account for a large proportion of workers despite a relative decline in numbers.

SUMMARY

Within less than a century Orientals in the United States have progressed from "cheap labor" to the emergence of a new middle class. Still concentrated heavily in the Western part of the United States, they are predominantly urban and well educated. Restrictive immigration practices have been reduced sharply and Oriental populations can be expected to increase both through immigration and natural increase. Their shift to employment in upper level white collar occupations has been remarkable and is undoubtedly attributable to their high levels of educational attainment.

Although rather cursory the foregoing discussion suggests that Orientals compete well and have come to achieve relatively high status in the American job market. From a background of unskilled labor and objects of discrimination, the Chinese and Japanese have gone on to reach comparatively high levels of occupational achievement. This calls for a fuller explanation of their success, since other minorities--Spanish, Indian and black--have yet to reach the status levels of the Oriental American.

CHAPTER 3

THE NEW MIDDLE CLASS IN THE JOB MARKET

Orientals in the United States have narrowed the gap between themselves and the dominant white society within the past couple of decades. The historical pattern of hostility toward and discrimination against Orientals has diminished. Although language barriers and cultural differences persist, the new generation of immigrants and the second and third generations of earlier immigrants are similar in many respects to the larger white American population. In this and the following chapters, it will be shown that differences between Orientals and whites in labor force participation, occupational achievement, mobility and earnings have become small. By their labor market participation alone, Japanese are barely distinguishable from whites. Chinese differ slightly, sometimes surpassing levels of white participation and sometimes not. Filipinos and Koreans present the largest contrasts with whites, although even these differences are minor in comparison with discrepancies between whites and other minorities (blacks, Indians and Spanish).

Despite the apparent leveling of differences between Oriental Americans and whites and the reduction in discrimination, to date there is very little detailed information to substantiate this. The purpose of this chapter therefore is (1) to investigate relationships between labor force participation and sociodemographic determinants of participation and (2) to examine differences between whites and Orientals in their labor force participation and employment. Differences in participation represent inequalities, and, as indicated in Chapter 1, a major concern is whether such differences also indicate discrimination. Paralleling questions of intergroup differences in labor force participation are similar questions about sex discrimination.

Natural increase and immigration have had the effect of increasing the Oriental population in the United States and their numbers in the labor force. By 1970 the civilian labor force included more than 600,000 Orientals 16 years of age and over:

	Number in the labor force (in 000's)
Japanese	270
Chinese	190
Filipino	138
Korean	25

Employment rates for Orientals are typically high, and unemployment rates ranged from a low of 2.5% for Japanese to 4.5% for Filipinos in 1970.

Higher rates of participation in the labor force for men than women are largely a consequence of the fact that men have traditionally been the principal breadwinners of the family and that many of the tasks performed by women (e.g., child rearing, food preparation) fall outside the customary definition of the economically active population. Table 3.01 depicts this pattern of male labor force dominance for the four Oriental groups as well as for the white population of the U.S. For all ages, participation rates for males are consistently higher than for females.

Not only do participation rates vary by sex, but they are also sensitive to differences in age. Among men in each of the populations, labor force participation rates (LFPR's) between ages 16-19 are lower than for most other age groups partly because students are included in these published figures. From ages 20-24, the rates rise sharply and continue to do so up to ages 25-34. LFPR's for males reach their peak between the ages 35-44 and then begin to decline gradually as they approach the 35-64 age group. By age 65 and above, participation drops drastically.

In general, LFPR's for women tend to peak in the early twenties, when many are still single and are relatively free from the burdens of household work and child care that accompany married life. On the other hand, low LFPR's are more characteristic of women who are relatively young (16-19), who are in their prime marriage and motherhood years (25-34), and who are in their senior years (65 and over).

More relevant to the present report are differences and/or similarities in levels of participation between Orientals and whites as well as comparisons among the Oriental populations after holding sex and age differences constant. Among males, all four Oriental groups appear to have about the same level of participation as white men. The overall participation rates among Orientals range from about 73% for Chinese to 79% for Japanese, with Filipino and Korean rates falling in between. These figures are not very different from the 77% participation rate registered by whites. The similarity in levels of participation between Orientals and whites shown in their overall participation figures is generally reflected in their age-specific values, with Japanese surpassing other Orientals in four of the six age-specific groups.

Among women, relative participation of Orientals is higher than whites, with Filipino women participating most. A little over 55% of Filipino women 16 years old and over are in the labor force compared to about 41% of the whites. Among Oriental women, Koreans most often reveal the lowest age-specific levels of participation. Japanese and Chinese women, on the other hand, tend to occupy an intermediate position between Filipino and

Table 3.01. Age-Specific LFPR's for Orientals and Whites, 16 Years Old and Over, by Sex, 1970

Sex and age	Japanese	Chinese	Filipino	Korean	White
Males	79.3	73.2	79.0	75.5	77.4
16-19	41.0	37.5	43.9	36.3	48.9
20-24	72.7	58.0	86.7	61.2	81.6
25-34	91.5	86.7	94.4	80.7	95.0
35-44	96.9	95.5	94.9	91.3	95.6
45-64	93.5	87.8	87.1	86.2	88.0
65+	29.3	24.8	32.1	21.0	24.9
Females	49.4	49.5	55.2	41.5	40.6
16-19	32.7	34.5	31.6	22.3	36.4
20-24	63.2	55.7	62.6	36.5	56.1
25-34	48.9	50.3	60.2	41.3	42.9
35-44	52.7	59.1	62.3	51.7	49.0
45-64	62.7	57.4	52.2	54.0	47.3
65+	12.0	12.0	11.4	10.6	9.8

Source: PC(2)-1G, Tables 4, 19, 34, 49; Table 6; and PC(1)-D1, Table 215

Korean women. However, variations in participation patterns among Oriental women may be noted for some age intervals.

An explanation often advanced to account for the high rate of participation of women who are members of color minorities in the United States is that the generally low socioeconomic status of these groups forces women to engage in gainful pursuits in order to supplement their low family income. This explanation may be appropriate to account for the high rate of participation of black women in the country (Bogue, 1969). However, the same interpretation cannot be fully applied to Oriental women and their families. Judging from their achievement in income, education, and occupation, which will be elaborated in greater detail in the following sections and later chapters, the economic position of Oriental women is not substantially different from white women. Thus, the high rate of participation of Oriental women could be attributed to the fact that they have the necessary qualifications for employment and that they seek jobs because they want employment and believe that work is available for them. It may mean also that obstacles to participation based on Oriental characteristics are now minimal. A look at the educational and technical preparations of Orientals supports this kind of observation.

PREPARATION IN THE LABOR MARKET: EDUCATION, VOCATIONAL TRAINING, AND DISABILITY

The amount of education and vocational training a person has received is directly related to active participation in the labor market and earnings potential. Indeed, it is probably their acquisition of higher education and training that accounts largely for the favorable labor market standing of present-day Orientals in this country.

Education

Labor force participation and unemployment among persons with one to seven years of elementary education. Among men with little formal education, Filipinos tend to have a higher level of labor force participation than any of the other race and color groups (Table 3.02). This pattern is consistent in all but one of the age-specific categories. The exception appears at ages 40-44 where Japanese men show a rate about 2% higher than Filipino men. Rates of participation among Japanese, Chinese, and white men are generally similar. The only sizeable differences among these groups occur at ages 40-44 where Japanese have 10% and Chinese about 8% advantage over whites.

Table 3.02. Age-Specific LFP and UR's for Males, 20-69, With One to Seven Years of Schooling, 1970

Age	Japanese	Chinese	Filipino	White
	Labor Force Participation Rates			
20-24	---	87.0	90.0	84.9
25-29	---	88.5	100.0	89.3
30-34	88.9	93.3	95.0	90.4
35-39	93.8	93.4	100.0	90.2
40-44	100.0	97.7	98.4	90.0
45-49	84.6	93.8	93.3	87.7
50-54	88.1	91.5	97.4	85.1
55-59	85.9	82.4	88.1	80.2
60-64	68.6	66.5	79.6	65.3
65-69	38.1	31.7	40.5	33.3
	Unemployment Rates			
20-24	---	15.1	5.6	7.7
25-29	---	0.0	0.0	6.6
30-34	0.0	2.4	0.0	5.3
35-39	0.0	2.4	4.8	4.9
40-44	5.9	3.5	1.7	4.4
45-49	3.0	2.8	3.5	4.3
50-54	3.9	4.2	5.4	4.3
55-59	4.1	7.4	4.4	4.0
60-64	3.4	5.7	5.4	4.4
65-69	0.0	5.0	5.7	5.4

Unemployment rates (UR's) among men with one to seven years of education are about the same. Unemployment tends to be highest in the youngest ages, 20-24, and of those in this age group, Chinese men indicate the most severe unemployment (15.1%).

Furthermore, while Filipinos tend to participate relatively more than other men, Chinese women lead all women in participation at most age levels (Table 3.03). LFPR's for Japanese, Filipino, Korean, and white women (where adequate frequency figures are available for the Korean group) are not very different at younger ages, 20-34. However, at ages 35-54, Filipino and Japanese women tend to have higher LFPR's than whites. Japanese women at ages 45-49 register a rate of participation of 70% which is the highest single figure in labor force participation for all female age and color groups.

UR's for Japanese women are generally lower than those of other groups. On the other hand, high unemployment rates are more characteristic of Korean and Filipino women than Chinese and white women, although not consistently for all age groups.

Labor force participation and unemployment rates among persons with four years of high school. Education is directly related to LFP. Men with four years of high school generally have higher rates of participation than those who have not gone beyond the elementary grades (Tables 3.02 and 3.04). Among men with four years of high school, rates of participation between color groups do not differ substantially, although whites tend to have slightly higher levels of participation than Orientals particularly at younger ages, 20-39. At ages 40 and above, differences in participation remain small and inconsistent in pattern.

In addition, high UR's for high school graduates are more characteristic among Filipino men then any of the groups in practically every age category. This is most evident in the oldest age group, 65-69, where Filipinos register 17.2% as compared to the next highest figure of 4.3% obtained for the Japanese. Koreans in the labor force are most likely also to be employed, as indicated by their zero rates of unemployment at specific ages (with sufficient numbers of cases). In general, unemployment for all high school graduates tends to be the highest at the youngest ages, 20-24.

Female LFP also increases as education rises from elementary to high school (Tables 3.03 and 3.05). Japanese and Filipino women appear to have higher LFPR's than Chinese, Koreans, and whites, but the differences are not consistent throughout all ages. Female UR's at the youngest ages, 20-24, are the highest for most of the color groups. However, two-thirds of all Filipino women, 65-69, who are in the labor force are unemployed. In turn, the Koreans exhibit their highest unemployment rate (14%) at ages 45-49. Levels of unemployment of Japanese and Chinese are generally low, in fact, slightly lower than whites at ages 40 and above. Filipino women generally have the highest level of unemployment among women with high school education.

Table 3.03. Age-Specific LFP and UR's for Females, 20-69, With One to Seven Years of Schooling, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	---	43.5	26.1	29.2	32.1
25-29	27.8	43.2	32.8	27.3	33.7
30-34	39.3	43.0	33.8	37.0	35.5
35-39	42.0	65.1	51.9	38.5	38.7
40-44	31.4	65.6	59.0	57.1	40.8
45-49	70.0	58.3	50.0	---	40.2
50-54	52.3	62.4	54.7	---	39.1
55-59	49.5	49.1	34.3	---	35.8
60-64	33.0	40.0	31.8	---	25.9
65-69	16.0	17.9	10.4	---	11.2
	Unemployment Rates				
20-24	---	14.9	8.4	0.0	11.5
25-29	0.0	6.3	15.9	20.1	10.1
30-34	9.2	0.0	0.0	5.9	10.1
35-39	0.0	6.9	10.8	20.0	8.8
40-44	0.0	3.4	8.8	0.0	6.4
45-49	0.0	4.9	3.4	---	6.0
50-54	2.1	4.2	3.5	---	5.9
55-59	3.6	5.5	8.7	---	5.0
60-64	5.5	2.8	9.4	---	5.0
65-69	4.4	0.0	20.2	---	7.1

Table 3.04. Age-Specific LFP and UR's for Males, 20-69, With Four Years of High School,* 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	87.9	85.5	92.5	84.2	94.4
25-29	96.8	91.2	95.6	83.3	97.8
30-34	96.0	94.7	96.9	95.2	98.1
35-39	97.4	97.0	94.5	93.8	98.0
40-44	97.8	96.9	92.1	92.9	97.4
45-49	98.6	94.4	92.5	100.0	96.7
50-54	96.6	95.1	97.9	100.0	95.3
55-59	95.6	90.4	92.4	90.0	91.8
60-64	82.8	80.0	85.4	---	79.1
65-69	58.8	30.0	60.4	---	45.1
	Unemployment Rates				
20-24	8.3	6.4	9.3	0.0	5.9
25-29	0.9	2.4	4.0	0.0	3.0
30-34	2.7	0.0	4.5	0.0	2.1
35-39	2.5	1.0	3.0	0.0	1.8
40-44	0.6	2.2	7.2	0.0	1.8
45-49	0.9	2.6	2.1	0.0	1.9
-54	0.5	4.5	0.0	0.0	2.0
5-59	0.5	0.0	2.7	0.0	2.1
0-64	0.0	0.0	1.5	---	2.8
65-69	4.3	0.0	17.2	---	4.0

*Does not include those persons with schooling beyond the high school level.

Table 3.05. Age-Specific LFP and UR's for Females, 20-69, With Four Years of High School,* 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	66.3	58.0	60.9	34.3	59.0
25-29	48.3	47.7	48.8	37.6	42.2
30-34	49.8	42.1	49.4	45.8	42.9
35-39	49.8	47.4	46.0	39.1	47.8
40-44	57.0	64.1	65.6	57.9	53.1
45-49	67.9	67.0	71.1	70.0	55.6
50-54	67.9	69.8	55.3	52.9	55.2
55-59	68.2	54.3	52.0	---	51.6
60-64	54.1	35.8	53.3	---	40.8
65-69	27.1	12.5	50.0	---	20.9
	Unemployment Rates				
20-24	5.4	7.4	8.9	12.8	5.9
25-29	4.3	6.3	5.5	0.0	4.7
30-34	3.8	2.9	5.2	6.8	4.0
35-39	4.6	5.3	6.7	3.6	3.6
40-44	2.3	1.9	6.3	0.0	3.4
45-49	2.1	1.9	7.5	14.3	3.2
50-54	.7	0.0	4.9	0.0	3.1
55-59	.7	0.0	0.0	---	3.1
60-64	1.7	0.0	12.4	---	2.9
65-69	7.0	0.0	66.6	---	4.8

*Does not include those persons with schooling beyond the high school level.

Labor force participation and unemployment rates among persons with four years of college. Participation in the labor force continues to rise as education reaches the college level (Table 3.06). Among men with four years of college, differences in participation between groups are again small.

In terms of unemployment, Japanese men generally have lower rates than whites and other Oriental groups. In general, however, differences in participation and unemployment among men with four years of college education are not large.

Female participation in the labor force among those with four years of college consistently reveals the positive influence of education. Women with college education have higher LFPR's than those with elementary or high school education. Also, female UR's tend to drop as levels of education increase (Tables 3.03, 3.05 and 3.07). Rates for women with college education shown in Table 3.07 indicate some reversals in the relative standing of Filipino women from those at the elementary or high school level. Among women with college education, LFPR's for Filipino women are higher than those of other Orientals and whites. These differences are impressive and hold in the first six out of eight age-specific groupings. On the other hand, differences among Japanese, Chinese, and whites are rather inconsistent and generally not substantial. UR's for Filipino women are somewhat higher than other female groups. However, the patterns are irregular and the differences in magnitude are rather small. In general, among college-educated females, rates of unemployment among Chinese and Japanese appear to be the lowest.

In addition, while considerable variations in labor force participation by education have been observed among Oriental and white men at specific ages, differences in their overall participation figures are rather negligible As shown in Table 3.08, ratios of LFPR's for specific Oriental men to whites, computed for all ages, only deviate from unity by a small fraction at given levels of education. In effect, the ratios suggest that Oriental men are about as likely to participate in the labor force as white men at given levels of education. On the other hand, a different picture is presented among women. At the elementary education level, all four Oriental groups of women yield ratios noticeably beyond unity, with Chinese and Filipino women leading all female participation. With the exception of Korean women, Oriental women with four years of high school are more likely to be in the labor force than whites with a high school education. LFPR's for Chinese and Japanese women are close to the white LFPR at the college level. In contrast with Japanese and Chinese women, Filipino women at the college level participate much more than white women, whereas Korean women manifest the lowest level of participation among women with a college education.

45-49	99.1	98.8	100.0	---	98.3
50-54	98.6	97.2	80.0	---	96.1
55-59	96.7	91.7	91.8	---	93.1
60-64	82.8	70.0	83.3	---	82.2
		Unemployment Rates			
25-29	0.5	2.6	3.1	4.3	2.0
30-34	0.5	0.0	3.4	6.9	1.2
35-39	0.5	1.0	6.1	3.7	1.0
40-44	0.8	2.3	0.0	0.0	1.1
45-49	0.9	2.3	0.0	---	1.2
50-54	0.0	2.9	12.5	---	1.5
55-59	3.5	3.1	0.0	---	1.7
60-64	0.0	0.0	0.0	---	1.7

* Does not include those persons with more than four years of college.

Table 3.16. Age-Specific LFPR's for Females, 20-44 Years of Age by Number of Related Children Under Six Years of Age, 1970

[illegible] and number

Table 3.07. Age-Specific LFP and UR's for Females, 25-64, With Four Years of College*, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
25-29	47.7	49.7	75.3	41.7	56.0
30-34	38.6	41.7	68.5	35.2	42.9
35-39	41.6	53.3	69.2	50.0	45.7
40-44	54.2	58.2	81.4	---	51.7
45-49	82.2	65.8	92.3	---	56.6
50-54	65.9	71.0	85.0	---	58.7
55-59	76.5	60.0	58.8	---	57.7
60-64	45.5	23.1	20.0	---	48.9
	Unemployment Rates				
25-29	2.7	0.0	3.2	7.7	2.3
30-34	1.6	4.1	.7	9.4	2.8
35-39	0.0	2.4	0.0	0.0	2.0
40-44	3.9	2.6	0.0	---	2.5
45-49	0.0	0.0	4.1	---	2.1
50-54	0.0	0.0	0.0	---	1.4
55-59	0.0	0.0	10.0	---	1.0
60-64	0.0	0.0	0.0	---	1.4

*Does not include those persons with more than four years of college.

Table 3.08. Ratio of LFPR's of Orientals to Whites by Sex and Education

Sex and education	Japanese	Chinese	Filipino	Korean
Male				
Elem., 1-7	.97	1.07	1.07	---
H.S. 4	1.01	.97	.98	---
Coll. 4	1.01	.98	1.01	97.7
Female				
Elem., 1-7	1.28	1.72	1.34	1.21
H.S. 4	1.15	1.10	1.11	.87
Coll. 4	.95	.99	1.40	.81

Vocational Training and Patterns of Labor Force Participation and Employment

While it is generally expected that persons with vocational training will have higher rates of participation and employment than those with no training, such patterns are not clearly evident in relation to Oriental men. As presented in Tables 3.09 and 3.10, participation rates among Oriental men with vocational training are not consistently higher than those without training of specific ages. In fact, the reverse is generally true among Chinese. In seven of the ten age categories, Chinese men without vocational training have higher rates of participation than those with training. Among white men, however, the positive influence of vocational training, differences in participation between race and color groups show that Orientals and whites are about the same in their levels of participation. Similar negligible differences in participation between groups are apparent among men without training.

Women's participation appears to be markedly influenced by vocational training. Female rates of participation shown in Tables 3.11 and 3.12 indicate that women with vocational training have substantially higher levels of participation than those without training. The differences are large and patterns consistent at all specific ages, regardless of color and race groups. Among those with training, Filipino women show generally higher participation than any of the female groups. White women, on the other hand, have lower rates than Orientals at most age levels, particularly at older ages. Among those without vocational training, Filipino women continue to lead in labor force participation at younger ages (25-44), with Japanese women predominating at older ages (45-69). Among women without vocational training, Korean and white women have noticeably lower rates of participation than the rest of the Oriental groups.

Similar patterns are observed for employment rates (Tables 3.09 and 3.10). Among Oriental men, the direction of influence of vocational training on employment levels is not clearly manifested. Oriental men with vocational training do not always have higher rates of employment (ER's) than those without training. Among whites, however, vocational training has a positive impact on employment, as indicated by the consistently higher ER's for men with training than those without training. As in participation, differences in ER's between men of diverse color groups are generally minimal, regardless of whether only men with vocational training or those without are examined.

ER's for women are substantially improved if they have had vocational training (Tables 3.11 and 3.12). Independent of race, color, and age differences, females with vocational training are more likely to be employed than those without training. Among women with vocational training, Japanese and Chinese tend to have higher rates of employment than other groups particularly at older ages (45 and above). However, among women without vocational training, differences in employment levels between

Table 3.09. Age-Specific LFP and ER's for Males, 20-69, With Vocational Training, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	90.1	77.1	89.0	100.0	93.8
25-29	95.3	91.1	94.8	88.9	97.4
30-34	95.8	87.4	93.0	94.0	97.7
35-39	97.3	96.1	92.9	92.1	97.8
40-44	97.7	95.5	96.7	100.0	97.2
45-49	98.7	96.1	93.8	93.3	96.4
50-54	97.1	93.9	94.9	92.3	95.0
55-59	90.7	92.8	89.7	75.0	89.8
60-64	77.8	81.4	81.1	---	77.9
65-69	58.1	36.5	45.3	---	42.4
	Employment Rates				
20-24	94.0	90.5	90.4	83.3	94.2
25-29	98.1	94.7	96.4	95.8	97.0
30-34	98.6	99.0	97.3	97.9	97.7
35-39	98.5	98.8	95.4	100.0	98.0
40-44	99.1	97.8	95.6	100.0	97.8
45-49	99.1	97.5	99.3	96.5	97.7
50-54	99.5	95.6	97.9	91.7	97.5
55-59	100.0	96.0	95.3	100.0	97.2
60-64	97.9	100.0	95.4	---	96.8
65-69	97.2	---	91.6	---	94.8

Table 3.10. Age-Specific LFP and ER's for Males, 20-69, With No Vocational Training, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	86.1	85.8	85.9	77.8	91.4
25-29	92.6	91.5	95.6	81.9	96.2
30-34	96.4	96.7	97.0	94.0	97.0
35-39	97.3	97.3	94.8	97.4	96.7
40-44	97.3	97.6	95.0	97.8	96.0
45-49	96.8	96.4	94.0	92.3	94.9
50-54	95.6	95.0	94.1	94.4	92.7
55-59	93.2	87.3	89.9	90.0	88.4
60-64	80.6	68.5	81.5	78.9	74.1
65-69	50.8	35.8	42.5	---	39.8
	Employment Rates				
20-24	94.0	92.1	91.7	85.7	93.2
25-29	98.4	99.0	96.4	96.7	96.6
30-34	97.5	98.4	97.0	95.1	97.4
35-39	99.0	98.6	97.0	98.3	97.6
40-44	98.9	98.4	98.5	100.0	97.8
45-49	99.1	98.1	97.6	100.0	97.6
50-54	99.2	97.2	95.2	100.0	97.4
55-59	98.5	96.6	96.7	100.0	97.4
60-64	98.6	96.1	95.6	100.0	96.8
65-69	95.7	96.6	90.4	---	95.7

Table 3.11. Age-Specific LFP and ER's for Females, 20-69, With Vocational Training, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	78.0	64.9	71.1	47.1	69.4
25-29	64.0	57.9	71.0	61.5	52.8
30-34	55.2	49.6	69.4	69.2	51.6
35-39	61.1	60.6	59.3	71.0	55.2
40-44	66.1	66.7	86.1	71.4	60.1
45-49	76.8	67.9	73.2	---	61.4
50-54	70.8	59.1	72.7	---	61.6
55-59	62.5	53.8	63.3	---	57.2
60-64	50.0	50.0	66.7	---	56.7
65-69	23.3	---	28.6	---	22.6
	Employment Rates				
20-24	96.3	97.2	93.1	100,0	95.2
25-29	96.7	94.6	96.5	93.8	95.6
30-34	97.3	98.4	98.3	96.4	96.3
35-39	96.1	96.5	96.8	100.0	96.7
40-44	98.3	97.9	98.5	100.0	96.7
45-49	98.7	100.0	97.5	---	96.7
50-54	100.0	100.0	100.0	---	96.8
55-59	100.0	100.0	100.0	---	97.0
60-64	100.0	100.0	87.4	---	96.8
65-69	100.0	---	100.0	---	94.7

Table 3.12. Age-Specific LFP and ER's for Females, 20-69, With No Vocational Training, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	67.2	62.5	59.1	36.5	55.1
25-29	50.6	49.6	59.5	38.4	41.1
30-34	44.5	48.6	42.4	37.5	40.0
35-39	46.8	52.0	58.8	41.3	44.8
40-44	54.6	62.9	64.4	56.4	49.3
45-49	65.4	63.6	60.6	59.3	50.3
50-54	65.2	64.9	57.4	55.3	49.2
55-59	61.9	53.0	45.5	55.3	45.0
60-64	40.7	40.2	31.9	34.4	33.7
65-69	20.3	20.6	18.1	22.2	15.9
	Employment Rates				
20-24	95.2	94.6	91.7	89.3	93.3
25-29	96.4	96.0	95.5	93.0	94.9
30-34	96.9	96.1	97.5	93.6	95.2
35-39	95.7	95.4	96.4	92.3	95.8
40-44	97.4	96.8	94.3	100.0	95.9
45-49	97.4	97.5	93.6	97.1	96.0
50-54	98.9	96.5	95.5	100.0	96.3
55-59	98.5	95.1	94.3	93.8	96.4
60-64	94.6	95.3	95.0	91.0	96.1
65-69	95.6	98.5	76.2	100.0	95.0

race and color groups are small and highly inconsistent in pattern at specific ages.

In general, the findings indicate that vocational training has a differential impact on participation and employment between sexes. Vocational training for women is directly related to higher labor force participation and employment, while among men, such a relationship is not clearly manifested. Thus, vocational training is more important in raising rates of participation and employment among women than men. The absence of a positive influence of vocational training among Oriental men may be due in part to their already high degree of occupational preparedness through formal education.

Disability

Just as education and vocational training may promote participation of workers in the work force, so may the presence and duration of a physical disability restrict workers from becoming members in the economically active population. Thus, differential work force participation must be seen in the light of differences in the impact of disability between groups. Indices of dissimilarity by disability status have been computed for each of the four Oriental groups in relation to whites, classified by age and sex (Table 3.13). At all specific ages, Japanese, Chinese, and Filipinos differ little from whites in labor force participation by disability influence. In these populations, D-values in both sexes range between 1% and 4%, indicating that very little shifting by disability would produce an equal distribution in their levels of participation. However, a relatively larger shift of 10% is required between Korean and white men at ages 50-59. The index of dissimilarity in this case reflects the larger proportion of Korean men reporting no disability (92%) than whites (87%). Also, Korean-white female comparisons at the oldest age category show a noticeable unevenness in disability distribution in these two populations, although the D-index here is lower than that observed for corresponding males by about 3%. By and large, however, dissimilarity indices for Orientals and whites suggest the absence of any substantial differences in their levels of participation by disability.

FAMILY, FERTILITY, AND MARITAL STATUS

Size of Family

Orientals generally have larger families than whites. Filipinos and Chinese, for example, average 4.23 and 4.01 members, respectively, as compared to 3.51 for whites. However, the average size for the

Table 3.13. Dissimilarity in Labor Force Participation by Sex, Age, and Disability, 1970

Sex and age	D-Indices for White and: Japanese	Chinese	Filipino	Korean
Male				
Under 30	.018	.021	.024	.050
30-49	.025	.028	.042	.020
50-69	.036	.042	.038	.104
Female				
Under 30	.010	.011	.012	.039
30-49	.019	.015	.016	.026
50-69	.016	.032	.041	.069

Japanese family is 3.67 which is about the same as that for whites. One reason for this may be that a large proportion of the Japanese population in the U.S. is native rather than foreign born, and the Japanese have more readily adopted the dominant norm of smaller family size.

Whatever the size of the family, however, labor force participation of Orientals and whites does not differ by size of family to any great extent. Rates of participation for men (Table 3.14) are all substantially high for the selected ages of 30-44. Size of family does not seem to have any significant influence on labor force participation for men.

Fertility

Children ever born. LFPR's for women share a marked inverse pattern with number of children ever born to women between ages 25-44 (Table 3.15). Among Orientals and whites, higher rates of participation are more characteristic of women who have born one or two children than those who have had three or more. Childless women reveal substantially high levels of participation, about 30% to 40% higher than women with five or more children. It is clear from these differences that larger numbers of children deter labor force participation of women. However, unlike labor force participation, employment rates do not vary inversely with children ever born for all groups. It is only among white women where this inverse pattern is most noticeable.

Furthermore, Filipino women appear to participate more than other women, regardless of the number of children born. Korean women, in contrast, are less likely than any groups to participate, particularly at the younger and intermediate ages, 25-39. In general, differences in participation and employment rates among Oriental and white women are small and inconsistent in pattern.

Children under six. The inverse relationship between fertility and female labor force participation becomes more pronounced when presence of children under six years of age is considered. Table 3.16 shows that women with no children under six at home have substantially higher rates of participation than those with a child under six years of age. In turn, women with one child under six have higher LFPR's than those with two children, and much higher than those with three or more children. These differences are impressive and reasonably consistent at all ages and for all women. Again, the explanation for the observed differences here is self evident. Presence of children under six demands attention and care from the mother which restricts her participation in the labor market.

With simultaneous controls for age and fertility level, Korean women appear to have lower LFPR's than any of the female groups. Rates of participation for Filipino women, on the other hand, are higher than other groups at all but the youngest ages.

Table 3.14. Age-Specific LFPR's for Male Heads of Families or Subfamilies, 30-44, by Family Size, 1970

Age and family size	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
30-34					
Two	94.3	96.6	97.6	90.0	97.2
Three	100.0	100.0	96.2	100.0	98.4
Four	97.9	96.8	97.5	100.0	98.9
Five	97.8	100.0	98.7	100.0	98.8
Six	96.0	100.0	97.6	---	98.6
Seven or more	100.0	95.7	97.5	---	97.5
35-39					
Two	92.9	96.7	94.7	100.0	96.2
Three	97.7	98.1	95.7	100.0	97.9
Four	98.9	98.4	100.0	98.0	98.5
Five	99.0	98.4	95.7	96.3	98.6
Six	98.9	97.8	92.7	88.9	98.5
Seven or more	100.0	99.0	98.2	---	97.6
40-44					
Two	96.1	92.6	93.8	---	94.9
Three	96.6	100.0	94.9	90.0	97.5
Four	98.6	98.0	100.0	100.0	98.4
Five	99.2	98.1	98.5	100.0	98.2
Six	98.4	98.4	100.0	100.0	97.9
Seven or more	98.8	99.0	97.7	---	97.4

Table 3.15. Age-Specific LFP and ER's for Females, 25-44, by Number of Children Ever Born, 1970

Age and children ever born	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
25-29					
None	77.9	77.6	79.3	61.9	79.7
One	38.9	32.0	57.7	28.6	41.8
Two	36.1	31.8	50.5	31.6	32.1
Three	36.9	36.5	41.9	33.3	27.2
Four	18.2	30.8	41.9	---	25.8
Five or more	38.9	38.5	28.6	---	23.1
30-34					
None	67.7	72.7	80.8	65.4	73.2
One	46.5	44.5	53.2	48.8	50.5
Two	37.7	39.4	52.2	26.7	41.2
Three	37.4	40.8	41.8	24.4	35.5
Four	40.8	50.0	41.0	22.7	32.4
Five or more	45.2	58.1	42.9	---	29.3
35-39					
None	61.2	76.3	81.5	52.2	68.5
One	47.1	53.4	54.9	47.1	54.5
Two	46.5	48.3	51.5	41.4	48.9
Three	44.5	50.0	53.0	48.9	43.7
Four	42.5	46.4	50.0	36.7	41.3
Five or more	47.7	54.0	57.0	---	34.2
40-44					
None	61.9	77.4	75.0	60.0	67.1
One	56.0	64.1	58.0	50.0	57.3
Two	56.6	61.3	77.8	57.7	43.2
Three	56.8	62.8	60.9	66.7	50.1
Four	50.8	61.5	81.2	44.4	46.0
Five or more	53.4	58.8	58.7	70.0	39.2
	Employment Rates				
25-29					
None	96.7	97.0	96.6	95.3	96.9
One	95.1	95.3	95.8	89.5	95.3
Two	97.2	94.7	91.9	89.9	93.9
Three	96.7	91.2	97.6	100.0	92.1
Four	100.0	100.0	94.3	---	90.5
Five or more	100.0	80.0	100.0	---	88.4
30-34					
None	97.9	94.8	98.1	96.0	97.3
One	96.1	95.7	100.0	90.2	96.1
Two	97.1	98.0	97.5	92.9	95.7

Table 3.15. Continued

Three	97.9	98.5	96.9	100.0	95.0
Four	97.5	93.0	93.9	100.0	93.6
Five or more	89.2	100.0	96.5	---	92.6
35-39					
None	95.6	95.9	94.0	100.0	97.2
One	96.6	100.0	100.0	93.6	96.4
Two	95.5	94.0	96.1	91.5	96.2
Three	97.5	94.8	95.1	91.4	95.7
Four	95.8	97.2	100.0	90.7	95.9
Five or more	92.9	94.4	97.2	---	93.8
40-44					
None	99.2	98.6	100.0	100.0	97.0
One	95.4	95.0	96.6	100.0	96.5
Two	98.1	96.1	92.8	100.0	96.5
Three	97.9	97.3	100.0	100.0	95.9
Four	96.9	99.0	89.3	100.0	95.7
Five or more	95.3	94.6	92.5	100.0	95.0

Table 3.16. Age-Specific LFPR's for Females, 20-44 Years of Age by Number of Related Children Under Six Years of Age, 1970

Age and number of children	Japanese	Chinese	Filipino	Korean	White
20-24					
None	73.4	67.7	69.6	39.7	78.2
One	45.6	37.9	39.5	28.3	36.1
Two	15.1	22.6	27.7	22.7	24.5
Three or more	---	---	28.0	---	20.4
25-29					
None	72.2	67.6	73.3	59.4	68.7
One	37.1	33.5	50.4	28.7	34.7
Two	23.1	21.8	42.9	25.4	22.8
Three or more	24.2	28.0	35.3	16.7	16.9
30-34					
None	59.3	62.8	69.8	56.2	56.1
One	36.0	45.3	47.2	34.8	31.3
Two	22.8	27.8	35.4	23.0	20.4
Three or more	13.3	19.5	32.3	14.3	14.7
35-39					
None	58.0	61.9	70.9	50.8	54.5
One	32.5	37.5	43.0	45.1	30.2
Two	24.7	28.8	37.2	16.7	21.5
Three or more	16.0	31.3	44.4	---	14.9
40-44					
None	59.0	65.3	68.5	60.7	54.7
One	40.5	59.0	63.2	73.3	32.4
Two	25.9	36.7	51.9	---	24.9
Three or more	---	---	---	---	19.3

Head of Household

Differences in participation and employment between Orientals and whites are generally small, and this pattern remains when only heads of households are considered (Table 3.17). Differences among men are not in any consistent direction at specific ages, except at the younger ages where whites have slightly higher participation rates than Orientals. Rates of participation for all male color groups are high between the ages 25-54.

LFPR's and ER's for female household heads are generally higher than for all women. All of the female heads have participation rates ranging between 60% and 80% in most of the specific age categories (Table 3.18). Therefore, there is a greater likelihood for a woman to be in the labor force if she is the head of household than if she is not. Filipino and Korean women have slightly lower participation rates than Japanese, Chinese and white women. In general, differences in participation and employment among female heads of household are not very large.

The sex gap in labor force participation narrows when household heads only are compared. Nevertheless, women who are heads of household still do not participate in the labor market to the same degree as comparable men. As heads of households, women are probably more compelled to seek jobs, and the presence of young children serves both as a deterrent and a stimulus to employment.

Marital Status

Marriage has the effect of increasing participation and employment levels for men while decreasing those for women (Tables 3.19 and 3.20). Married men have substantially higher rates of participation and employment than single men. In contrast, single women exhibit far higher rates of participation and employment than married women. These patterns hold for different race, color and age groups with only a few exceptions. The differences reaffirm the restrictive nature of conditions associated with marriage and family building upon female labor force participation and employment. Without these restrictions, women are about as likely to participate in the labor force as men. This is further shown in Table 3.19 where differences in LFP and ER's between men and women are substantially reduced among never married persons.

Among married men, differences in LFP and ER's are neither large nor consistent within specific ages. Among married women, on the other hand, white and Korean women tend to have lower levels of participation than Japanese, Filipino, and Chinese women.

Among never married men, Japanese have the highest rates of participation. The rest of the men have about the same level of labor force

Table 3.17. Age-Specific LFP and ER's for Male Heads of Household, 20-69 Years of Age, 1970

Age	Japanese	Chinese	Korean	Filipino	White
	Labor Force Participation Rates				
20-24	92.7	91.3	88.5	86.7	96.8
25-29	95.2	94.5	97.1	86.8	98.3
30-34	97.4	98.2	97.6	95.5	98.4
35-39	97.8	97.7	95.4	97.8	98.1
40-44	98.2	97.2	96.9	98.7	97.4
45-49	98.4	96.7	95.5	96.7	96.4
50-54	97.3	95.0	94.2	96.4	94.4
55-59	93.7	89.2	90.9	85.7	89.8
60-64	80.9	72.5	83.5	77.8	76.1
65-69	53.4	36.7	45.8	63.6	41.3
	Employment Rates				
20-24	96.0	94.9	97.3	84.5	96.4
25-29	98.9	98.7	98.0	96.5	97.6
30-34	98.6	99.0	98.6	96.4	98.0
35-39	98.9	98.9	96.4	98.5	98.1
40-44	99.1	98.6	97.6	100.0	98.0
45-49	99.3	98.0	97.9	98.2	97.9
50-54	99.3	96.6	97.5	96.4	97.2
55-59	99.3	96.6	96.3	100.0	97.4
60-64	98.6	96.6	96.0	100.0	97.0
65-69	95.7	96.7	89.7	100.0	95.6

Table 3.18. Age-Specific LFP and ER's for Female Heads of Household, 20-69 Years of Age, 1970

Age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rates				
20-24	88.4	86.9	75.0	88.9	83.1
25-29	88.3	88.2	77.2	62.8	79.3
30-34	69.3	78.6	69.5	63.2	76.0
35-39	76.5	80.8	67.6	78.8	77.8
40-44	78.2	84.7	74.4	68.2	78.3
45-49	86.9	77.8	83.3	78.6	78.7
50-54	84.5	72.1	75.0	66.7	76.1
55-59	76.7	67.5	56.5	---	71.1
60-64	66.3	50.9	45.5	---	54.3
65-69	25.4	26.1	17.6	---	25.6
	Employment Rates				
20-24	97.6	100.0	94.4	---	95.9
25-29	96.4	100.0	96.5	92.5	96.1
30-34	98.0	100.0	98.4	100.0	96.3
35-39	95.3	92.8	100.0	92.3	95.7
40-44	96.5	95.2	96.5	100.0	96.2
45-49	97.5	96.4	97.2	81.8	96.5
50-54	98.5	100.0	95.2	100.0	96.7
55-59	100.0	96.4	100.0	---	96.8
60-64	98.2	89.0	100.0	---	97.2
65-69	90.2	100.0	100.0	---	95.3

Table 3.19. LFP and ER's for Married Persons (Spouse Present), 16-69 Years of Age, by Sex and Age, 1970

Sex and age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rate				
Male					
Under 35	97.2	97.7	96.6	96.8	98.1
35-39	98.6	97.9	96.9	97.9	97.6
50-69	88.1	81.1	83.1	88.5	80.8
	Employment Rate				
Under 35	99.0	98.5	97.6	95.2	97.4
35-49	99.2	98.7	97.2	99.2	98.2
50-69	99.1	97.3	96.4	98.2	97.4
	Labor Force Participation Rate				
Female					
Under 35	42.5	43.3	48.6	35.1	39.2
35-49	52.5	56.9	58.9	45.7	45.7
50-69	51.4	49.0	44.8	43.9	34.9
	Employment Rate				
Under 35	95.8	95.2	94.1	93.2	94.0
35-49	97.1	97.0	94.9	97.2	96.1
50-69	98.2	96.3	93.8	95.9	96.0

Table 3.20. LFP and ER's for Never Married Persons, 16-69 Years of Age, by Sex and Age, 1970

Sex and age	Japanese	Chinese	Filipino	Korean	White
	Labor Force Participation Rate				
Male					
Under 35	83.6	79.6	83.2	75.5	81.1
35-49	93.2	90.3	89.4	89.7	84.0
50-69	73.1	62.8	62.0	46.7	62.8
	Employment Rate				
Under 35	94.5	94.2	87.7	93.9	90.3
35-49	98.1	96.5	96.4	100.0	94.8
50-69	94.3	95.2	92.9	100.0	94.6
	Labor Force Participation Rate				
Female					
Under 35	84.6	78.0	83.9	72.0	78.3
35-49	87.3	87.3	87.2	57.1	79.4
50-69	76.3	65.5	75.5	72.2	63.2
	Employment Rate				
Under 35	97.2	96.9	96.7	86.7	94.2
35-49	98.9	100.0	97.6	91.8	97.6
50-69	99.1	94.4	89.1	100.0	07.5

activity, except in the oldest age category where LFP for Korean is noticeably low. Among single women, Koreans and whites have lower LFPR's than Japanese, Chinese, and Filipino women. Japanese slightly lead all female groups in participation in this marital category.

CITIZENSHIP

Citizenship status bears no clear-cut influence on levels of employment for both Orientals and whites. Although one might expect to find higher employment rates for naturalized and native born workers because they are generally better adjusted to the country's labor market conditions as compared to aliens, data in Tables 3.21 and 3.22 do not support this expectation. For all working groups and within specific age and sex categories, employment rates for aliens are in general just as high as those for naturalized or native born. However, a few departures from the general pattern are evident. Within the Japanese and Korean male populations, naturalized men have higher rates of employment than the alien and native born at most ages. Also, among Filipino women, higher employment rates are more characteristic of naturalized and native born women than those with alien status particularly at older ages. Nevertheless, disregarding these exceptions, the findings suggest that if differences in employment conditions by citizenship status do exist in the United States, Oriental and white alien workers seem to have been able to offset some of the citizenship limitations presumably through better preparation in education and training. Disadvantages of being foreign born for Orientals have been offset in recent years, since Oriental immigrants are relatively well-educated before their arrival.

Finally, differences in employment rates between groups within specific citizenship, sex, and age groupings are small. The only noticeable patterns of difference are the higher employment rates among Japanese and Korean men relative to other groups who are naturalized citizens.

SUMMARY

Differences in labor force participation and employment between Orientals and whites in the United States are not very great, and there is no consistent indication that any of the Orientals are either better or worse off than whites. With relatively rare exceptions, such as unemployment rates for Filipino men with high school education, there is little evidence of

Table 3.21. Age-Specific ER's for Males, 20-69, by Citizenship Status and Nativity, 1970

Status and age	Japanese	Chinese	Filipino	Korean	White
Naturalized					
20-24	100.0	92.9	88.9	---	92.9
25-29	100.0	97.6	97.3	100.0	96.7
30-34	100.0	97.8	92.9	93.3	97.5
35-39	100.0	100.0	96.3	100.0	97.7
40-44	90.0	97.9	96.4	100.0	98.2
45-49	100.0	97.6	96.2	100.0	97.6
50-54	100.0	95.4	98.0	100.0	97.6
55-59	---	98.1	97.5	---	97.6
60-64	100.0	95.5	93.9	100.0	96.5
65-69	100.0	96.9	90.5	100.0	93.9
Alien					
20-24	100.0	89.7	91.9	87.5	94.0
25-29	98.3	95.2	97.6	94.9	95.7
30-34	97.8	98.7	99.3	96.1	97.6
35-39	97.5	95.9	100.0	97.4	97.7
40-44	100.0	98.9	97.0	100.0	96.6
45-49	100.0	95.3	100.0	100.0	97.1
50-54	100.0	100.0	87.0	100.0	95.8
55-59	---	93.2	95.2	100.0	95.4
60-64	100.0	93.5	98.9	100.0	94.6
65-69	95.7	100.0	85.3	---	90.8
Native Born					
20-24	93.6	88.5	86.5	82.3	93.4
25-29	98.2	98.4	94.0	94.4	96.8
30-34	97.4	100.0	97.9	100.0	97.5
35-39	98.2	99.3	95.3	100.0	97.7
40-44	99.5	96.9	100.0	100.0	97.8
45-49	98.7	98.5	100.0	100.0	97.7
50-54	99.6	97.9	92.0	92.3	97.5
55-59	98.9	96.2	96.8	100.0	97.4
60-64	98.3	97.3	100.0	100.0	96.9
65-69	92.8	100.0	100.0	---	95.7

Table 3.22. Age-Specific ER's for Females, 20-69, by Citizenship Status and Nativity, 1970

Status and age	Japanese	Chinese	Filipino	Korean	White
Naturalized					
20-24	100.0	100.0	90.8	100.0	94.9
25-29	78.6	95.5	92.4	96.3	94.3
30-34	96.2	94.3	100.0	96.6	94.8
35-39	93.7	92.8	100.0	92.2	95.7
40-44	97.8	96.3	95.2	100.0	95.4
45-49	96.6	98.1	97.9	---	96.1
50-54	100.0	97.9	100.0	---	96.1
55-59	100.0	88.9	100.0	---	95.3
60-64	100.0	100.0	100.0	---	95.3
65-69	93.6	100.0	100.0	---	91.5
Alien					
20-24	88.4	96.3	92.9	84.9	93.7
25-29	89.4	96.4	96.5	98.0	94.3
30-34	90.6	92.7	99.3	89.2	94.8
35-39	91.7	94.5	96.7	100.0	95.0
40-44	92.7	94.2	96.3	100.0	94.7
45-49	100.0	94.5	97.4	---	94.5
50-54	100.0	88.7	95.5	---	95.1
55-59	---	96.3	93.2	---	94.7
60-64	100.0	96.5	85.4	---	94.0
65-69	100.0	100.0	50.0	---	92.4
Native Born					
20-24	96.4	94.4	87.6	100.0	93.9
25-29	98.4	94.1	96.4	74.9	95.2
30-34	98.3	100.0	96.6	100.0	95.3
35-39	98.6	98.8	96.6	100.0	96.0
40-44	99.2	96.6	92.8	100.0	96.1
45-49	97.7	98.7	93.2	91.2	96.4
50-54	99.1	98.5	100.0	100.0	96.5
55-59	98.2	100.0	100.0	---	96.9
60-64	94.5	100.0	100.0	---	96.7
65-69	95.8	100.0	---	---	95.4

discrimination against Orientals in participating in the labor market or in obtaining jobs. Rather the major differences in labor market participation are those between men and women and by age. Women's participation is typically lower than for men, even after various controls are introduced for such factors as education, marital status and fertility. Persons at the middle adult ages are more likely to participate in the labor market than very young or older persons. The principal observations are presented briefly in the following discussion.

Age and Sex

The expected curvilinear relationship between age and labor force participation was generally noted among both Oriental and white men, with peak participation occurring between ages 35 to 44. Among women in most of the population groups, LFPR's tended to be high among those in their early twenties when many were still single and relatively free from the burdens of household work and child care. Low LFPR's were more characteristic among women in three identifiable age categories: those who were relatively young (16-19), those in the prime marriage and motherhood years (25-34), and those in the retirement years (65 and over). Moreover, differences in levels of participation between men and women confirmed another commonly observed pattern: men had higher rates of participation than women at all ages and for all population groups.

Comparisons of LFPR's among Oriental and between Oriental and white men showed negligible differences, both before and after holding age differences constant. However, a slight advantage in participation among Japanese men over other men was evident.

Participation among Oriental women tended to be higher than for white women, with Filipino women generally participating at the highest and Korean and white women at the lowest levels. Relatively low LFPR's for Korean women were most noticeable in the younger ages (16-34). Japanese and Chinese women tended to occupy an intermediate position, registering LFPR's lower than Filipino and higher than Korean and white women.

Education

The positive relationship between education and labor force participation was substantiated by the present findings. Orientals and whites alike obtained higher LFPR's if they had completed four years of college than if they had completed four years of high school; the same was true for four years of high school in relation to less than eight years of schooling. Accordingly, lower unemployment rates were more characteristic of

persons with college training than those with high school or elementary education. This inverse pattern was more evident among women than men.

Less than eight years of school. LFPR's among Filipino men at this educational level were higher than any of the other male populations. Differences in rates of participation among Japanese, Chinese, and white men were relatively small, except at ages 40-44 where rates of participation among Japanese and Chinese were noticeably higher than among white men. In terms of unemployment, similarly small differences were observed among men, with one rather noteworthy exception. Among men ages 20-24, Chinese registered an unusually higher unemployment rate (15.1%) than Filipinos (5.6%)or whites (7.7%).

Among women, Chinese led all groups in participation at most age levels. Differences in LFPR's for the rest of the groups were small, although Filipino and Japanese women tended to have higher rates of participation than whites at middle to older ages (35-54). In addition, the participation rate for Japanese women ages 45-49 was remarkably high, about 30% higher than whites, and 12% to 20% higher than other Oriental women. Also, UR's for Japanese women were generally low, while Korean and Filipino women tended to have higher unemployment figures than other women.

Four years of high school. At the high school level, LFPR's for white men were somewhat higher than Oriental men, particularly at younger ages, 20-39. Among those 40 years of age and over, divergene in levels of participation were small with no consistent patterns of difference. Filipinos were most likely to be unemployed of the men in this study with high school education. Korean men, on the other hand, showed remarkably low unemployment figures. It should be noted, however, that low frequencies were observed in some of the Korean cells.

In general, Oriental women with high school education participated more heavily in the labor market than whites with similar education, although in some instances, Oriental women obtained higher unemployment rates than white women.

Four years of college. Oriental and white men differed little in participation at this educational level. A mild exception was noted in the lower rates of Filipino men in certain age groups. In general, however, differences in unemployment among men with college education along specific ages were not substantial.

Among college women, Filipino women ranked relatively high in levels of participation in the labor force. In the first six out of eight age-specific grouping, Filipino women obtained higher LFPR's than other Oriental and white women. The unemployment figures, on the other hand, showed slightly lower rates for Japanese and Chinese than other female groups.

In addition, among men at all ages, ratios of Oriental to white participation rates at various levels of education showed only a few deviations from unity, indicating the general similarity in levels of participation among Oriental and white men regardless of education. However, among women at all ages, participation ratios of specific Oriental groups more often than not exceeded unity, particularly at the elementary and college levels. Among women with college education, participation ratios of Chinese and Japanese approached unity, with Koreans lagging behind. Filipino women manifested the highest positive deviation from unity at the college level.

Vocational Training

Participation and employment rates among Oriental men with vocational training were not consistently higher than those without training. In fact, the pattern for Chinese men showed a clear reversal, where LFPR's for those with vocational training were lower than for those without training at most age levels. Among white men, however, the positive influence of vocational training was more clearly evident. In addition, among men with or without training, differences in LFP and ER's were not great, with each of the populations tending to have high rates of participation at the peak labor force ages.

In contrast to the pattern among men, rates of participation and employment among women were markedly affected by vocational training. Regardless of age or color differences, women with vocational training obtained substantially higher LFP and ER's than those without training. Filipino women most often led all populations in levels of participation, while white women generally had the lowest LFPR's among women with vocational training.

Disability

Orientals burdened with a physical or mental disability are no more handicapped than whites when it comes to labor force participation. Dissimilarity indices for each of the Oriental groups in relation to whites by sex were generally small.

Size of Family

With the exception of the Japanese, Orientals average larger families than whites. This might have resulted from the carry-over of extended family patterns typical of many families coming from Asian nations. However, with controls for the size of family, Oriental and white men were about equally likely to be in the labor force.

Fertility

Children ever born. A marked inverse relationship between children ever born and female labor force participation occurs for both Orientals and whites. Women with one or two children had higher levels of participation than those with three or more, thus, clearly indicating that increasing numbers of children restrict participation of women in the labor market. In general, Oriental women achieved higher levels of participation than white women. In particular, Filipino women had the highest LFPR's while Korean women had the lowest among all women. No substantial differences in employment rates between groups were observed, however.

Children under six. The negative impact of fertility on female labor force participation became more evident among women with children under six years of age. Women without children under six consistently showed higher LFPR's than those with one or two, and much higher than those with three or more children in their care. Within specific age categories and fertility levels, Filipinos and Koreans continued to have the highest and lowest LFPR's respectively, among all women.

Head of Household

Differences in LFP and ER's between Oriental and white men remained noticeably small when only heads of household were considered. However, whites had slightly higher participation rates at the younger ages than Orientals.

LFP and ER's of female heads of household were higher than those observed for all women, reflecting the greater economic burden on women who assume the role of principal breadwinners in the family. In general, differences in participation and employment rates among female household heads were not large, although Filipino and Korean women generally had lower rates than Japanese, Chinese, and white women.

Marital Status

Marriage showed a differential effect of increasing participation and employment levels for men while decreasing those for women. These patterns reaffirmed the presence of conditions associated with marriage and family building (observed earlier on female fertility); i.e., they impinge negatively upon female participation and employment. Among never married persons, women were about as likely to be in the labor market as men.

Participation and employment rates among married men once again exhibited negligible intergroup differences. Among married women,

Japanese, Filipino and Chinese women showed higher LFPR's than white and Korean women.

Among never-married men and women, the Japanese led all populations and sub-groups in rates of participation. Korean and white women, in contrast, were less likely to participate than other single women.

Citizenship

Finally, data on citizenship showed that, in general, naturalized and native born persons were just as likely to be employed as those with alien status. Among men, ER's were about the same within citizenship classes and age categories. The same negligible differences in ER's were found among women.

In general, findings indicate that Orientals have achieved equality in levels of participation and employment with the majority white population--an accomplishment not shared by many minority groups such as Spanish Americans, Indians, and blacks in this country. The following chapter examines further labor force activity of Orientals in terms of occupational achievement.

CHAPTER 4

VARIATIONS IN OCCUPATIONAL ACHIEVEMENT

The high level of educational attainment among Orientals results in high rates of employment, as seen in the previous chapter. This high degree of employment extends to their high levels of occupational achievement, also attributable to their educational accomplishments. In this chapter, levels of occupational status reached by Oriental workers in the United States will be described and documented. Primary comparisons continue to be between each of the Oriental groups and whites.

LEVELS OF ACHIEVEMENT

Occupational achievements of Oriental workers are presented and examined in two different but related ways. One is to compare percentage distributions of workers among occupation groups and the other is to compare and contrast levels of achievement by using a specific measure of occupational status.

Occupational Achievement of Men

The generally high levels of occupational attainment for Oriental men, undoubtedly a consequence of their educational attainment, are implied by their concentrations in white-collar occupations. Measures of their achievement confirm this.

Oriental men are concentrated heavily in white-collar occupations. Japanese, Chinese and Korean men compare very favorably with white men in this respect. Nearly two-thirds of Korean men and about half of all employed Japanese and Chinese men are employed in white-collar occupations--professional, managerial, sales and clerical (Table 4.01). In contrast, only 30% of Filipino men are in white-collar jobs, as compared with 41% of employed white men. Although Filipino men appear to rank relatively low in this respect, they are more heavily represented at this level than black or Spanish origin workers. Percentage distributions by major occupation groups are presented in Table 4.01 along with measures of occupational achievement, shown in parentheses, which will be considered shortly.

Table 4.01. Major Occupation Groups and Mean Occupation Scores for Males, 1970*

Occupation	Japanese	Chinese	Filipino	Korean	White
Male	100.0	100.0	100.0	100.0	100.0
	(.476)	(.442)	(.378)	(.600)	(.461)
Professional	21.2	26.7	17.0	45.7	14.3
	(.781)	(.820)	(.819)	(.844)	(.783)
Managerial	12.2	13.1	2.9	11.0	12.4
	(.619)	(.559)	(.601)	(.611)	(.615)
Sales	5.8	4.4	1.8	2.9	7.1
	(.469)	(.419)	(.428)	(.602)	(.496)
Crafts	22.3	8.1	14.6	11.9	23.6
	(.421)	(.422)	(.417)	(.426)	(.437)
Clerical	8.1	7.8	8.1	6.2	7.1
	(.362)	(.341)	(.354)	(.379)	(.376)
Transp. eq.	3.0	1.5	4.4	2.5	5.8
	(.355)	(.345)	(.351)	(.333)	(.365)
Operative	7.3	9.7	11.0	8.7	13.3
	(.263)	(.193)	(.265)	(.275)	(.281)
Laborer	8.9	2.5	8.4	4.3	5.4
	(.259)	(.262)	(.281)	(.263)	(.274)
Service	5.9	25.1	20.3	6.1	6.4
	(.193)	(.096)	(.155)	(.242)	(.265)
Farm and private house.	5.3	1.1	11.5	.7	4.5
Dissimilarity:	.122	.324	.276	.314	---

*Mean occupation scores shown in parentheses.

White males are relatively predominant over Orientals in blue-collar occupations as a whole--crafts, operatives, transportation equipment operatives and laborers. Almost half of all employed white men work at blue-collar jobs.

With more than one in ten employed in farming, Filipino men are more heavily concentrated in farm occupations than other Orientals and whites. Only about 1% of Chinese and Koreans are in farming, while Japanese men with 5% in farming resemble more closely the pattern for white men.

Aside from private household service work, where few men are employed, Chinese and Filipino men are relatively heavily concentrated in service occupations. A fourth of all Chinese men, an unusually high proportion, and one out of five Filipino men are employed as service workers; Japanese and Korean men are present in about the same proportions as whites.

Similarities and differences in the occupational concentrations of Oriental and white men come into clearer focus when examining specific occupation groups. Korean men, for example, are not only more heavily clustered in white-collar jobs but show an extremely large concentration in professional occupations. Nearly half (46%) of all Korean men are in professional jobs, a far greater concentration than the 14% of white men who are professionals. Chinese, Japanese and Filipino men too are more strongly represented in professional occupations. White men are predominant in sales occupations, but, with the exception of Filipinos, Oriental men are represented in about the same proportions as white men in managerial and clerical jobs. Among blue-collar jobs, white men are especially predominant at the crafts level, although Japanese men manifest a similar concentration. Koreans and Chinese are conspicuous by their scarcity among unskilled laborers, while Filipino and Japanese men are slightly more predominant than whites.

Differences in occupation distributions can be summed up with the dissimilarity index, as shown at the bottom of Table 4.01. This index value provides a convenient way of indicating the unevenness of the occupation distributions. As indicated earlier, the dissimilarity index shows the proportion of one group that would need to be shifted into different occupations in order for two occupation distributions to be the same. Comparisons in this instance are between the distribution of white men and each of the Orientals.

If white-collar occupations are considered as high-ranking, then white men are underrepresented at this level, or conversely, Oriental men are overrepresented. One of the highest index values is in the comparison of Korean and white men, where 31% of white men would need to shift primarily upward into white-collar and especially into professional jobs if equal

distributions of Korean and white men are to be accomplished. At the other extreme, the occupation patterns for Japanese and white men are relatively similar; only 12% of one group would have to be shifted to attain equal distributions. But here too, white men would need to shift mainly toward professional occupations.

Distributions of Chinese and Filipino men differ from the pattern for white men about as much as does the Korean distribution. However, the Chinese and Filipino patterns present a relatively unique bi-modal pattern, with clusters in professional and service occupations and relatively thin concentrations in other occupations. Half of all Chinese men, for example, were employed in these two occupations. As reflected by occupation scores, this means that Chinese and Filipino men tend to be polarized at the highest and lowest occupation levels.

Differences in occupation distributions between Oriental and white men provide a basis for anticipating differences in levels of occupation achievement. Knowing their heavy concentration in professional occupations, it is not surprising that Korean men have the highest average occupation score. On a 100-point scale the five groups of men rank in the following order, as shown in Table 4.01.

Korean	.600
Japanese	.476
White	.461
Chinese	.442
Filipino	.378

Achievement levels of Korean and Filipino men differ substantially, but Japanese, white and Chinese rank relatively close to one another.

These scores represent the standing of workers on a scale which ranges from a low of zero to a high of .990, and they can be interpreted as indicators of occupational achievement or "prestige." Since occupation scores were computed for all workers, comparisons can be made between any particular individuals or groups of workers. In brief, these scores are based on the proportions of workers in each of 203 occupations who were above the median levels of education and earnings for each occupation. These proportions were used in a regression equation to obtain an estimated score for each occupation. Individual workers were assigned scores in accordance with their occupation in 1970. On the basis of this assignment, average scores were computed for each of the subgroups. (See Appendix A for a more detailed description of the rationale and procedures used in computing the occupation scores.)

In combination, the degree of concentration in an occupation category and the average level of achievement for workers in a particular occupation

category help explain the overall levels of achievement. Korean men, for example, with nearly half their numbers employed in professional occupations also show the highest average level of achievement for any of the occupation groups--a mean occupation score of .844. In sharp contrast, Filipino men in service occupations attain an average occupation score of only .155 and a fifth of all Filipino men worked in service occupations.

In comparison with white men, Oriental men average as high or higher in occupational achievement at the professional level, and this condition helps elevate the overall achievement of Oriental men since relatively high proportions of Orientals worked as professionals.

As indicated by mean occupation scores, the major occupation groups are ranked in the same order for each group of workers, with minor exceptions. The rank order is reversed in two instances for Chinese men--transportation equipment operatives and laborers--and in one instance for Filipinos--laborers. For white and Japanese men, gradations are reasonably sharp and unambiguous for the four top-ranking occupations--professional, managerial, sales and crafts. However, clerical workers and transportation workers do not differ greatly in their average levels of achievement. Operatives and laborers clearly rank below clerical and transportation equipment workers, but show only a slight difference between their levels of achievement for white and Japanese men. Occupation scores are not shown for farm workers primarily because earnings consitute an important part of the scoring procedure and earnings from farm work are not comparable to earnings from nonfarm work. While it may be unfortunate that comparable measures of occupational achievement for farm workers are not given, it is inappropriate to assign scores as if there are no differences in the nature of earnings. Occupation scores for men in private household service work are also omitted since very few men are so employed.

In noting the rank order of major nonfarm occupation groups for these Oriental and white males, the sequence from high to low differs from what some might expect. In addition to the possibility that changes in this ordering might have occurred over time, two points must be emphasized. First, the populations included here were carefully selected so as to exclude students and residents of group quarters. Second, for the first time in 1970, transportation equipment operatives were designated as one of the major occupation groups. As a consequence of this identification, average achievement levels of operatives appear to be lower than observed with earlier data. The inclusion of transportation equipment operatives with all other operatives in data prior to 1970 had the effect of elevating the average achievement for operatives. As a net result, the present measures of achievement for operatives and laborers raise some doubts as to whether operatives, generally regarded as semiskilled, consistently outrank laborers,

generally viewed as unskilled. The necessary detailed information for explaining this similarity in levels of achievement is not immediately available, but it is entirely possible that operatives, as now defined, and laborers differ very little in educational attainment and perhaps also in average earnings.

Occupational Achievement of Women

Oriental women are distributed among major occupation groups more nearly like white women than was the case for men. However, women generally are distributed much differently than men in the occupation structure--more heavily concentrated in white-collar particularly clerical and less in blue-collar occupations. Few women are in farm or transportation equipment operative occupations. On the other hand, women are more likely than men to be in private household service work.

Index of dissimilarity values (Table 4.02) show that Japanese and white women differ only slightly in their proportions in major occupation groups. The occupation distributions for Chinese and Filipino women differ from the distribution of white women, but only about one out of six Chinese and Filipino women would have to change occupation groups to bring about equal distributions. Korean women differ most from white women, chiefly because of their greater concentrations in professional, operative and service occupations. In comparison with white women, Chinese women are more often employed in professional and operative jobs and less often in clerical, sales and service occupations. Filipino women most often cluster in professional, clerical and service occupations.

Women's levels of occupational achievement differ from those for men in several ways. As expected, their overall levels of achievement are lower than for men. However, in contrast with men, Filipino women show the highest and Korean women the lowest levels of occupational achievement. The rank-order of women is

Filipino	.338
White	.314
Chinese	.302
Japanese	.295
Korean	.281

as shown in Table 4.02. The range from high to low average scores for women is far less than found for men.

The order of major nonfarm occupation groups for women also is different than the sequence for men. Again with the exception of Chinese women, the ordering is consistent for all women. Women, however, average

Table 4.02. Major Occupation Groups and Mean Occupation Scores For Females, 1970*

Occupation	Japanese	Chinese	Filipino	Korean	White
Female	100.0	100.0	100.0	100.0	100.0
	(.295)	(.302)	(.338)	(.281)	(.314)
Professional	15.6	21.0	27.0	23.3	14.7
	(.684)	(.710)	(.643)	(.656)	(.673)
Managerial	3.8	4.0	1.5	1.9	3.6
	(.599)	(.576)	(.564)	(.520)	(.603)
Crafts	1.6	1.4	.9	1.7	1.8
	(.395)	(.408)	(.417)	(.375)	(.417)
Clerical	32.9	29.4	28.4	19.5	36.9
	(.274)	(.268)	(.285)	(.262)	(.278)
Laborer	.7	.8	.7	.7	.9
	(.267)	(.263)	(.251)	(----)	(.265)
Sales	6.2	4.5	4.5	3.7	8.5
	(.240)	(.241)	(.242)	(.211)	(.244)
Operative	15.5	24.4	13.8	20.6	14.8
	(.143)	(.072)	(.162)	(.144)	(.182)
Service	17.8	11.9	17.6	23.5	15.7
	(.116)	(.103)	(.129)	(.098)	(.119)
Private house.	3.6	1.9	2.3	3.8	1.8
	(.005)	(.004)	(.004)	(.004)	(.005)
Farm and transp. equipment	2.2	.8	3.3	1.1	1.2
Dissimilarity:	.066	.164	.168	.242	---

*Mean occupation scores shown in parentheses.

higher achievement in craft occupations than in sales. As a result, achievement in craft jobs ranks third behind professional and managerial occupations, whereas craft work ranks fourth for men. Men in sales work rank third, but women sales workers show a much lower achievement, with sales workers ranking behind clerical and labor occupations.

The highest levels of occupational achievement, of course, are at the professional level, where women average .640 or higher. Chinese and Japanese women professionals average slightly better than white women with Filipino and Korean women not far behind. The relatively heavy concentrations of women in professional occupations which are also high-score occupations contributes to their overall achievement. Detracting from these accomplishments are the clusters of women in operative and service occupations, where achievement scores average less than .200. Clerical work results in lower than average levels of achievement for women, and at least a fourth of each group, except for Korean women, are employed as clerical workers. Within each of the major nonfarm occupations, there is relatively little variation among Oriental women or between Oriental and white women.

Most Frequent Jobs

Concentrations in specific occupations differ considerably among Oriental men but much less so among Oriental women. From the list of 203 occupations used for constructing occupation scores, the ten occupations which accounted for the largest number of workers were identified on the basis of frequency and rank for each of the groups (Tables 4.03 and 4.04). Among these ten specific occupations, a larger proportion of the total number of employed women than men are accounted for. At least 40% of each of the Oriental female populations are employed in these "high-employment" jobs. In contrast, only 28% of white men and 30% of Japanese men are accounted for by these ten occupations. Chinese, Korean, and Filipino men were much closer to the degree of concentration of women in such jobs, with 42%, 39%, and 38%, respectively.

Among men, the concentrations of Japanese and whites are duplicated for eight of the ten jobs. Chinese men are largely noncompetitive with either Japanese or white men, since only for those in manager-administrative jobs do Chinese men overlap Japanese and white men. The top-ten jobs for Filipino men are different from the top jobs for the other groups, but Filipino men appear in several of the same jobs found for other Orientals. Korean men too are scattered relative to white and other Oriental men.

In general, these comparisons suggest that Japanese men are most competitive with whites, since they tend to be employed in many of the same jobs. However, as with whites, Japanese men are not highly competitive with other Oriental men. Chinese and Korean men appear to be the least competitive with other Orientals and whites.

Table 4.03. Employment of Males in Ten Occupations With the Largest Numbers Employed, 1970

Occupation	Japanese	Chinese	Filipino	Korean	White	Occ. Score
Mgrs.-Adm., n.e.c.	1	2		2	1	.606
Foremen, n.e.c.	5				2	.518
Truck drivers			7		3	.369
Farmer-owner, tenant	6				4	---
Carpenter	3		10		5	.368
Cleaning service	10		2		6	.169
Mech. & repair, auto	4				7	.394
Other specified oper's.					8	.263
Other crafts	9				9	.377
Buyers-Purch. agents Sales mgr.	8				10	.652
Gardeners-ground keepers	2		9			.243
Accountants	7		8	4		.740
Cooks, exc. pr. household		1	4			.086
Waiters-food counter workr.		3				.045
Rest.-cafe-bar mgr.		4				.376
Other food service		5	5			.060
Tchr., college-univ.		6		3		.900
Elec. engineer		7		6		.890
Laundry-dry clean. oper.		8				.083
Civil engineer		9				.879
Physician, Med. Osteo.		10	3	1		.979
Farm laborer			1			---
Other specif. oper's.			6			.263
Life & phys. scientist				5		.882
Other writers-artist-entert.				7		.598
Other mgrs.-adm.				8		.591
Research work, not specif.				9		.788
Computer specialist				10		.821
Percent of total employed:	30.0	42.0	37.5	39.0	27.8	---

Table 4.04. Employment of Females in Ten Occupations With the Largest Numbers Employed, 1970

Occupation	Japanese	Chinese	Filipino	Korean	White	Occ. Score
Secretary	1	2	2	4	1	.321
Sales clerk, ret. trade	3	7	8	8	2	.167
Bookkeeper	6	3	6		3	.279
Waiter-food counter workr.	2	8	4	1	4	.045
Tchr.-elem., kinder.	5	6	9		5	.738
Typists	7	5	3	7	6	.215
Nurse, dietician, therapist	9	9	1	2	7	.478
Sewer & stitcher	4	1		3	8	.030
Cashier		4		10	9	.110
Clerical, not specified	10				10	.264
Priv. household serv.	8					.006
Cooks, exc. priv. household		10				.086
Cleaning service			5			.169
Physician, med.-osteo.			7	9		.979
Farm labor			10			---
Hairdresser-cosmot.				5		.116
Assembler				6		.225
Percent of total employed:	42.4	41.6	41.4	40.8	43.5	---

The occupation scale values, shown in the righthand column, range from a high of .979 for physicians to a low of .045 for waiters and food counter workers. It must be emphasized that these are occupation scores assigned to an occupation, rather than averages computed for a group of workers. Inspection of these scores provides insight into the overall levels of occupational achievement. Korean men, for example, who average a high level of achievement, are most heavily employed as physicians and as managers or administrators, high scoring occupations. Filipino men are employed more often as farm laborers and cleaning service workers than in other specific occupations, and, although scores are not shown for farm workers, these are low-ranking occupations.

Among women, there is a much stronger clustering in fewer jobs. Only 17 jobs are covered in the listings of the top ten for women in the five populations whereas men among these same populations encompassed 28 specific occupations. Moreover, five of the ten jobs for women overlap with each of the Oriental and white female populations. Therefore, this suggests much keener competition among women for the same jobs. Stated differently, women seem to have more equal opportunities among themselves for the same kinds of jobs. But among the 45 jobs included for both men and women, only four overlap for both sexes: farm labor, cleaning service, cooks, and physicians. Hence, it is quite clear that job competition between men and women is restricted. With rare exceptions, women are most heavily concentrated in jobs traditionally defined as "female."

The strong clustering of women in traditionally female jobs directly influences their overall levels of achievement. Only in the three specific professional jobs--physician, nurse and teacher--are women employed in substantial numbers in high-ranking jobs. Otherwise, they tend to be most concentrated in jobs which were assigned scores well below the level of .300. Even as secretaries they can attain a score of only .321, the score for secretarial work.

Occupational Achievement and Age

The high level of occupational achievement for Korean men in 1970 is relatively high at all ages (Table 4.05). The peak level of occupational achievement, as reflected by these scores, is between the ages of about 25 to 39 for men. From ages 25 to 45 the ratios of Korean to white scores remain fairly constant. Filipino men, with the lowest overall average score among these men, nevertheless were able to parallel closely the level of white men at the middle adult ages.

Filipino and Japanese women record the highest occupation scores among women between the ages of 25 to 34. Women appear to reach their

Table 4.05. Mean Occupation Scores for Employed Persons, By Age, Sex and Origin, 1970

Age and Sex	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
Under 20	.295	.210	.253	.252	.301
20-24	.410	.349	.341	.410	.409
25-29	.508	.542	.486	.552	.479
30-34	.574	.545	.490	.658	.493
35-39	.546	.484	.540	.660	.496
40-44	.503	.435	.469	.629	.487
45-49	.459	.439	.358	.566	.478
50-54	.426	.391	.296	.468	.458
55-59	.404	.358	.261	.398	.441
60-64	.409	.292	.226	.578	.433
65-69	.346	.334	.224	.571	.420
Female	.295	.298	.342	.294	.314
Under 20	.260	.234	.244	.312	.230
20-24	.345	.319	.323	.240	.327
25-29	.386	.433	.424	.328	.356
30-34	.348	.373	.377	.300	.328
35-39	.283	.299	.366	.275	.316
40-44	.277	.243	.282	.287	.313
45-49	.269	.270	.249	.339	.309
50-54	.259	.234	.312	.237	.305
55-59	.242	.227	.240	.251	.303
60-64	.242	.210	.183	.324	.309
65-69	.159	.240	.302	.297	.297

peak levels of occupational achievement about five years younger than men. As with white men, the average scores for women are relatively stable over the age span, with noticeably less tendency to decrease at the older ages.

PREPARATION FOR OCCUPATIONAL ACHIEVEMENT: EDUCATION, TRAINING AND HEALTH

Differences in levels of occupational achievement should disappear when persons "equally well qualified" are compared. Although it is not possible to test this hypothesis in the most rigorous sense, controls for educational attainment, vocational training and disability can be expected to diminish differences in mean occupation scores. In comparing Orientals with white workers, it is quite evident at the outset that discrepancies in overall levels of occupational achievement are relatively minor, certainly not as great as those between white and black workers.

Education

Differences in levels of occupational achievement between whites and Orientals diminish at the higher educational levels for men. Among women the pattern is less clear. The overall mean occupation scores for Japanese and Chinese men differ by no more than about 4% from the mean score for white men, while Filipino men score about 18% below and Korean men about 30% higher than the mean for white men. Japanese, Chinese and Korean women are within about 6% of equalling the mean occupation score for white women whereas Filipino women are nearly 10% above white women. In view of these relatively slight contrasts, reduction of differences also may be slight.

Among men however, differences in levels of occupational attainment were greater at the lower educational levels and either disappear at higher educational levels or at least diminish (Table 4.06). The mean occupation score for Japanese men is .476 barely higher than that for white men (461), and at each educational level their respective scores closely parallel one another. But despite this closeness, the mean occupation scores for Japanese men are only about 90% of the level of white occupation scores among those with less than four years of high school. Japanese and white men with four or more years of college have essentially identical scores.

Table 4.06. Mean Occupation Scores For Employed Persons, By Sex and Education, 1970

Sex and Years of School Completed	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
None	.271	.174	.198	.550	.302
Elem., 1-7	.298	.193	.218	.313	.329
Elem., 8	.332	.237	.244	.344	.352
H.S., 9-11	.350	.261	.296	.336	.384
H.S., 12	.409	.350	.345	.443	.430
College, 1-3	.485	.462	.383	.454	.519
College, 4	.653	.654	.558	.609	.658
College, 5 or more	.779	.809	.794	.806	.785
Female	.295	.298	.342	.294	.314
None	.152	.104	.166	.112	.197
Elem., 1-7	.148	.106	.139	.136	.175
Elem., 8	.142	.138	.164	.218	.193
H.S., 9-11	.177	.186	.224	.144	.225
H.S., 12	.257	.264	.245	.220	.282
College, 1-3	.322	.335	.289	.305	.370
College, 4	.539	.512	.437	.406	.623
College, 5 or more	.684	.697	.595	.711	.716

The reduction of differences between Chinese and white men is even more apparent. For those with eight years of elementary education, the Chinese mean score is only about two-thirds the level of the white mean score. This difference totally disappears among college graduates. For Filipinos reduction of differences generally does not occur, or if it does, the pattern is much less clear. Korean men, with a higher overall mean score than white men, nevertheless evince mean scores similar to those for white men at the college level.

One reason why differences in occupational achievement are smaller at the higher levels of education than at lower levels is that lower level jobs are less dependent on educational achievement, and therefore other factors are relatively more powerful determinants. At the level of college education, the knowledge and skills derived from reaching this educational level play a more important part in determining levels of occupational achievement.

The narrowing of the occupational achievement gap among women is most evident in comparing white with Japanese and Chinese women. At the completion of eight years of elementary education, Japanese and Chinese women's occupational achievement is about three-fourths the level of white women. For high school graduates, Japanese and Chinese women reach about 90% of the level attained by comparable white women. This similarity in achievement drops slightly at the college graduate level, but, for those with five or more years of college, there is very little difference in level of occupational achievement among white, Japanese and Chinese women. Since Japanese and Chinese women tend to be relatively well educated, the argument may be seen in reverse. That is, Japanese and Chinese women who have attained at least a high school education typify their groups and manifest levels of occupational achievement comparable to those of white women. However, Japanese and Chinese women who are below the level of high school graduation do not do as well in occupational achievement as comparable white women. For Filipino and Korean women, it is much less clear that the occupational achievement gap with white women lessens at the upper educational levels, although their mean occupation scores increase with education as is generally the case.

The gap between men and women in occupational achievement also narrows as higher levels of education are reached. Japanese, Chinese and white women average about two-thirds the level of occupational attainment of their male counterparts. There is relatively little difference between mean occupation scores of Filipino men and women, but for Koreans the average scores for men are double those for women. At the lower levels of education, Japanese, Chinese and white women are relatively less well off in comparison with men. But for those who have reached the level of a college education, each of these three groups of women have achieved occupational

levels at least three-fourths that for men. For those who have completed four years of college, for example, white women's occupation scores are 95% of the level of white men. Chinese women achieve less in comparison; for college graduates, they attain occupational levels only about three-fourths the level of their male counterparts.

In sum, educational attainment has a direct influence on levels of occupational achievement, but not all types of workers share equally in the gains from schooling. Most noticeably, women do not match the levels of occupational achievement reached by men even though the gap narrows with education. However, despite inequalities in occupational achievement between the sexes at all educational levels, women appear to experience the greatest relative gains from attaining higher educational levels. By taking the ratios of mean occupation scores for (a) college graduates to high school graduates and (b) high school graduates to elementary 8, it is seen that women's occupational achievement rises with increasing education more than that of men. For example, among white women, the mean occupation score for college graduates is more than double that for high school graduates, whereas for white men mean scores for college graduates are only about half again higher than for high school graduates. Gains from additional education are not as noticeable among Oriental women, but without exception the completion of more years of schooling results in a greater gain for women than for men. It may be argued, of course, that women's generally lower level of occupational achievement provides "more space" at higher levels to which they can move, and, even though their benefits from higher education are relatively greater than for men, they still do not match the occupational achievement of men. Among whites for example, women must have better than a high school education if their level of occupational achievement is to reach or surpass the occupational level of white men with only eight years of elementary education. This same condition prevails for Orientals. For example, Japanese women must have some college education to match the occupational achievement of Japanese men with eight years of elementary education.

Vocational Training

A major objective of vocational training programs is to help develop and improve work skills in order that persons may secure employment and/or attain higher levels of employment. As measured by the occupational achievement scores, this objective is being met with respect to Oriental and white men and women.

Although the increment in occupational achievement resulting from job training is sometimes very slight, Orientals and whites who reported they had no job training as of 1970 score below the averages for their respective groups (Table 4.07). The only exception to this pattern is for

Table 4.07. Mean Occupation Scores For Employed Persons, By Sex and Vocational Training, 1970

Sex and Training	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
No training	.472	.426	.353	.634	.457
Training					
Business and Office	.518	.491	.468	.572	.530
Nursing, Health	.736	.825	.767	.890	.589
Trades and Craft	.432	.401	.361	.449	.446
Engineering tech., draftsman	.638	.713	.674	.693	.601
Agr. or home ec.	.399	.231	.265	.652	.390
Other field	.510	.547	.481	.484	.515
Not reported	.387	.353	.336	.353	.383
Female	.295	.298	.342	.294	.314
No training	.293	.276	.327	.258	.310
Training					
Business and office	.324	.355	.324	.275	.324
Nursing, health	.373	.499	.424	.437	.383
Trades and craft	.206	.256	.173	.147	.224
Engineering tech., draftsman	.444	.549	.619	.000	.493
Agr. or Home ec.	.218	.243	.305	.484	.336
Other field	.415	.532	.443	.382	.472
Not reported	.268	.306	.305	.283	.295

Korean men whose mean occupation score was higher for those without job training (.634) than for all Korean men (.600); but it must be remembered that Korean men are heavily concentrated in the medical profession.

The relatively slight overall benefit to Orientals and whites from job training camouflages the differential effects on achievement of area of training. Men show higher levels of occupational achievement than those without training if they had training as engineering technicians and draftsmen, in business and office work or in the fields of nursing and health. Women with training in these areas also score higher than women without training.

Benefits from job training are unevenly distributed between Orientals and whites, as indicated by measures of occupational achievement. For those with vocational training in business and office work and in the trades and crafts, white men appear to gain more than Japanese and Chinese men. In contrast, Japanese and Chinese men with training in nursing and health fields or as engineering technicians and draftsmen gain more than white men with training in these areas. As a group, Chinese women show a relative gain in comparison with white women as a result of training in each of the specific areas except agriculture and home economics, whereas other Oriental women manifest no such consistent improvement.

Disability

Workers free from disabilities generally show a higher level of occupational achievement than those with some disability (Table 4.08). Hence, in terms of "readiness" for achievement in the job market, physical and mental disabilities constitute an obstacle. It should be noted that census data indicate a person's perception of disability, rather than a medical diagnosis. In some instances a person's "success" in the job market may influence his perception of his health. There is no way with this census data of knowing the specific nature of a reported disability.

In 1970, workers who reported that they were unable to work because of a disability (i.e., a work-preventing disability) average substantially lower occupation scores than those reporting no disability, and often lower than those with work-limiting disabilities. For white men, those with a work-preventing disability scored only about 80% as high as those with no disability. For Chinese men, the extremely disabled scored only about half as high as those without a disability. Japanese men with a work-preventing disability were about midway between white and Chinese, with the work-preventing disabled scoring about three-fourths as high as workers without a disability. For Filipinos and Koreans, the sample frequencies for disabled workers were too small to permit conclusions. For white, Japanese and Chinese women, the relationship between levels of achievement for the disabled and nondisabled were about the same as for their male counterparts.

Table 4.08. Mean Occupation Scores For Employed Persons, By Sex and Disability, 1970

Sex and Disability	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
No disability	.480	.458	.387	.623	.465
Work-limiting disability					
Less than 6 mos.	.396	.231	.292	.546	.421
6-11 mos.	.423	.317	.371	.555	.411
1-2 years	.375	.281	.418	.580	.415
3-4 years	.441	.382	.320	.045	.419
5-9 years	.364	.329	.220	.560	.422
10 years or more	.414	.390	.275	.475	.424
Work preventing disability	.352	.223	.2[illegible]	.472	.384
Female	.295	.298	.342	.294	.314
No disability	.298	.305	.342	.278	.317
Work-limiting disability					
Less than 6 mos.	.215	.187	.291	.346	.266
6-11 mos.	.239	.187	.235	.000	.265
1-2 years	.256	.264	.145	.091	.270
3-4 years	.250	.247	.072	.515	.274
5-9 years	.234	.195	.233	.000	.277
10 years or more	.183	.293	.230	.291	.277
Work preventing disability	.244	.192	.203	.478	.260

Among "healthy" workers, there is no indication that Oriental men and women improve their level of occupational achievement relative to white workers. By the same token, the absence of a disability does not lower the relative occupational standing of any of the Oriental men and women. At the other extreme, Chinese men and women with a work-preventing disability drop well below the level of achievement for healthy Chinese and also lose ground relative to the work-preventing disabled whites.

SOURCES OF EMPLOYMENT

Industry

Variations in levels of occupational achievement are influenced by the type of industry in which workers are employed. As with occupational categories, industries have different demands and requirements which are reflected in different occupational structures within an industry. The education and skill requirements for employment in professional services, for example, are not the same as for employment in construction, manufacturing, or agriculture. Certain occupational categories tend to be concentrated more in some industries than others. Professional occupations provide an illustration of this with a heavy concentration of those in professional occupations also concentrated in the professional service industry. Such concentrations as this are partly a function of the classification schemes for occupations and industries. Despite this however, most occupations are found in most industries. One exception is the confinement of farming occupations to agriculture industry.

The highest levels of occupational achievement occur in the professional services industry for Oriental and white men and women (Table 4.09). In this industry group, Korean men show a remarkably high mean occupation score (.618), and even Filipino men, with the lowest average among these men, show a relatively high level of achievement (.613). Among women, the Chinese record the highest level of achievement (.551) in professional service employment, and all of the Oriental women average above white women.

The occupational achievement of men employed in finance, insurance and real estate ranks second behind those in professional service industries. Again, it is the Korean men who achieve the highest average scores (.624) and the Filipino men the lowest (.464) in this industrial category.

For the remaining industry groups, there is no clear or consistent ranking by levels of occupational achievement. Public administration comes

Table 4.09. Mean Occupation Scores For Employed Persons, By Sex and Industry Group, 1970

Sex and Industry	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
Agr., Forestry, fisheries	.267	.296	.155	.241	.262
Mining	.440	.634	.429	.563	.444
Construction	.432	.577	.392	.424	.423
Manufacturing	.517	.591	.418	.557	.441
Transp., communctn., utility	.446	.462	.352	.420	.446
Wholesale and retail trade	.431	.241	.275	.448	.432
Finance, ins., and real estate	.604	.552	.460	.624	.585
Business and repair services	.468	.553	.380	.522	.462
Personal services	.294	.222	.208	.219	.348
Entertainment and recreation	.448	.404	.296	.576	.431
Professional services	.705	.778	.629	.822	.671
Public administr.	.535	.573	.423	.530	.529
Female	.295	.298	.342	.294	.314
Agr., forestry, fisheries	.198	.176	.142	.193	.217
Mining	.500	.434	.000	.000	.353
Construction	.294	.401	.343	.215	.334
Manufacturing	.239	.147	.289	.222	.263
Transp., communctn., utility	.333	.339	.318	.289	.312
Wholesale and retail trade	.125	.205	.213	.173	.227
Finance, ins., and real estate	.345	.346	.323	.296	.347
Business and repair services	.343	.406	.300	.305	.350
Personal services	.120	.143	.102	.120	.138
Entertainment and recreation	.309	.414	.318	.292	.306
Professional services	.450	.549	.479	.496	.442
Public administr.	.356	.377	.340	.415	.374

close to ranking third by level of occupational achievement for men, with the mean scores for white and Japanese providing this ranking. Chinese men show relatively high achievement in mining (.634), construction (.565), and public administration, (.565). Aside from agriculture, forestry and fisheries, employment in personal service and in wholesale and retail trade industries leads to relatively low levels of occupation achievement for men. Filipino men in the personal service industry, for example, average only .202, a third of the level achieved by Filipino men in professional services. Chinese and Korean men in the personal services also fare rather badly with scores of .216 and .219, respectively. Similarly, for women, there is no consistent ranking of average levels of achievement by industry groups.

The generally favorable accomplishments of Oriental workers in comparison with white workers is seen further by examining the ratios of mean occupation scores for each of the Oriental groups to the scores for whites. Japanese men and women closely approximate the levels of occupational achievement shown by whites for all industries. In personal service industries, Japanese men and women tend to fall below whites, but in transportation, Japanese women do a little better than white women. With the exceptions of employment in wholesale trade for men and in manufacturing for women, the Chinese do as well as whites in all industrial categories. Filipino men fail to reach or surpass the levels of occupational achievement shown for white men in all industries, although in four of the industries Filipino men fall within 90% of scoring as high as white men. Filipino women, with a high overall level of achievement, score higher than white women in five of the twelve industrial categories. Korean men, with the highest mean occupation score of all groups, show levels of achievement higher than for white men in all but three industries, and in those instances their performance is at least 90% as high as for white men. Korean women, in contrast, fail to reach the level attained by white women in all industries except professional services and public administration.

Class of Worker

Wage and salary workers employed by private business firms far outnumber those working for Federal, State and local governments, but government employees reach higher levels of occupational achievement than those in private enterprise. For both men and women and for whites and Orientals this pattern holds consistently. In part this may be attributed to the relative preponderance of white collar-jobs in government, and, in the case of state and local governments, to the number of public university and school teachers. For men the highest levels of occupational achievement are found among employees of state governments, whereas for women the highest levels occur for those working for local governments.

On the average, levels of occupational achievement for Oriental men exceed those for white men in state and local government, with the exception of Filipinos who consistently fail to match their white counterparts (Table 4.10). For workers in private business, however, only Japanese men equal or surpass the level attained by white men.

Among women Filipinos outdo white women in the four categories of workers with the exception of federal employment. For women employed by state governments, both of the Orientals fare better than white women, as was true for men.

In sum, the basic patterns of relationships between Oriental workers and white workers is not altered much by controlling for class of worker. However, employees of governmental units, especially those in state and local government, generally reach higher levels of occupational attainment than those employed in private business.

FULL-TIME AND PART-TIME EMPLOYMENT

Weeks Worked

The number of weeks worked in 1969 has a direct bearing on the index of occupational achievement by virtue of the fact that earnings are dependent on the proportion of time during the year spent in employment. Earnings in 1969 are of course a major component in the index of occupational achievement.

Mean occupation scores are highest for men who worked a full year, as one would expect (Table 4.11), and with each increment in weeks worked scores also increase. However, the highest occupation scores for women occur for those who work a part-year, i.e., the highest scores for white, Japanese and Chinese women are found for those working 40 to 47 weeks in 1969, and the highest for Filipino and Korean women appear at 48 to 49 weeks. The most immediate explanation for women attaining their highest levels of occupational achievement with less than 48 weeks of work is the relatively large numbers employed in occupations, such as teaching, which by convention do not cover the full 52 weeks.

For the full work year of 50 to 52 weeks, Japanese, Chinese and Korean but not Filipino men reached levels of occupational achievement as high as or higher than white men. Filipino and Korean women, however, attained higher occupational status than white women among full year workers. Filipino and Korean women also outscored white women among those working 40 to 49 weeks.

Table 4.10. Mean Occupation Scores For Employed Persons, Sex and Class of Worker, 1970

Sex and Class of Worker	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
Private Business	.465	.394	.353	.581	.444
Federal govt.	.522	.549	.407	.582	.524
State govt.	.635	.766	.553	.724	.567
Local govt.	.545	.630	.473	.668	.547
Self-employed	.427	.436	.522	.605	.474
Working without pay	.272	.324	.427	---	.246
Female	.295	.298	.342	.294	.314
Private business	.245	.249	.318	.249	.274
Federal govt.	.351	.396	.360	.333	.378
State govt.	.465	.566	.471	.524	.429
Local govt.	.485	.562	.537	.522	.517
Self-employed	.298	.283	.343	.380	.345
Working without pay	.221	.192	.152	.418	.258

Table 4.11. Mean Occupation Scores For Employed Persons, By Sex and Weeks Worked In 1969

Sex and Weeks Worked	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
13 weeks or less	.400	.272	.302	.338	.359
14-26 weeks	.446	.368	.347	.529	.391
27-39 weeks	.434	.333	.351	.597	.412
40-47 weeks	.458	.363	.342	.586	.432
48-49 weeks	.463	.373	.362	.619	.448
50-52 weeks	.482	.474	.395	.607	.473
Did not work in 1969	.351	.305	.300	.629	.420
Female	.295	.298	.342	.294	.314
13 weeks or less	.244	.268	.270	.201	.272
14-26 weeks	.278	.302	.310	.270	.295
27-39 weeks	.315	.290	.324	.266	.349
40-47 weeks	.332	.293	.365	.294	.353
48-49 weeks	.254	.243	.369	.341	.309
50-52 weeks	.300	.315	.359	.328	.313
Did not work in 1969	.199	.238	.272	.198	.267

Hours Worked

Differences in the number of hours worked per week are in part a consequence of the type of occupation and industry, and the number of hours worked should be related to occupation scores since for many workers earnings are directly dependent on an hourly wage. However, on the whole, it is not necessarily the case that either average earnings or occupation scores will be higher as working hours increase. In general, for men there seems to be a single optimum number of hours insofar as attaining the highest occupational score. In most cases those who worked between 35 and 40 hours per week in 1970 average higher occupation scores than those who worked either shorter or longer hours (Table 4.12). Occupation scores, therefore, tend to increase with the number of hours worked only up to a certain point. Then mean occupation scores decline for workers who spend longer hours.

For women there is not a single optimum number of hours for achieving the highest mean occupation scores. The pattern for white women, for example, rises and falls and then rises again as hours of work increase. The lowest mean occupation score for white women occurs for those working 15 to 29 hours per week (.275). For those working 35 to 39 hours, the mean score was .331. Then the mean score drops slightly to .318 for those with a 40-hour work week, from which it rises again to a peak of .364 for women working 60 hours or more. This pattern is perhaps less distinct for Oriental women, but nevertheless is similar to the white.

Oriental men working 35 to 39 hours achieve occupation scores higher than the white average. In general, among men putting in a "full-time" work week (i.e., 35 to 40 hours), Japanese, Chinese and Korean men average higher achievement than white men. Filipino men, however, do not benefit as much from working full-time hours.

CITIZENSHIP AND IMMIGRATION

The degree to which people are assimilated or acculturated into American society is reflected in part by their citizenship status. For immigrants, the period of time since immigration to the United States provides a further clue, at least to the length of time they have been exposed to American society. In general, it may be expected that the more highly assimilated and the longer the period of time since immigration, the greater the level of occupational achievement.

Three categories of citizenship status can be identified from census data: native born, naturalized citizens and aliens. By virtue of birth,

Table 4.12. Mean Occupation Scores For Employed Persons, By Sex and Hours Worked

Sex and Hours Worked	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
1-14 hours	.412	.392	.293	.604	.395
15-29 hours	.419	.393	.278	.587	.403
30-34 hours	.446	.420	.311	.454	.421
35-39 hours	.537	.551	.465	.642	.505
40 hours	.481	.490	.362	.564	.450
41-48 hours	.462	.384	.375	.611	.482
45-59 hours	.477	.387	.422	.734	.489
60 or more hours	485	.376	.578	.796	.470
Female	.295	.298	.342	.294	.314
1-14 hours	.227	.295	.272	.231	.290
15-29 hours	.240	.251	.251	.186	.275
30-34 hours	.255	.282	.299	.251	.286
35-39 hours	.328	.313	.369	.278	.331
40 hours	.302	.318	.338	.303	.318
41-48 hours	.305	.256	.396	.260	.336
45-59 hours	.314	.274	.471	.544	.361
60 or more hours	.328	.247	.623	.441	.364

the native born population should be more assimilated or better adjusted to American society than foreign born persons. Immigrants who have become naturalized citizens ough. to be better integrated into American society than aliens. Lacking additional information or controls, these categories provide a rather crude means of reflecting the degree of assi: ilation. A particular citizenship status by itself does not qualify or disqualify a person for any particular level of occupational achievement. However, "other things being equal," persons in the same citizenship category should achieve similar levels of occupational success.

Among white men and women, levels of occupational achievement follow the expected pattern (Table 4.13). Native born whites achieve higher levels than naturalized citizens, and aliens rank third. Among Orientals, however, this pattern does not appear, except for Chinese women. Otherwise, the native born show the highest levels of occupational achievement for Chinese men and for Japanese and Korean women. Aliens rank highest among Japanese and Korean men and among Filipino men and women.

Aside from the white population, these figures indicate no clear or consistent pattern between nativity and levels of occupational achievement. Before this kind of conclusion becomes too firmly entrenched, it would be worthwhile to examine this topic more intensively in an effort to determine the influences of such factors as age and education on occupational achievement by nativity.

Immigrants entered the United States at different points in time and, following the assimilation notion, those who have been here the longest should be more highly assimilated. Again however, such factors as age at the time of immigration and level of educational attainment may influence levels of occupational achievement as much as immigration experiences.

For white immigrants, men and women show the highest levels of occupational achievement if they immigrated between 1935 and 1944 (Table 4.13). Whites immigrating either before or after that period did not score as high. Earlier immigrants are likely to be older on the average than more recent immigrants, even though they may have been about the same ages at the time of entry into the United States. Therefore, the younger recent immigrants are doing about as well as the now older earlier immigrants.

The highest levels of occupational achievement among Oriental immigrants varies by the period of immigration. For Japanese and Filipinos, the most recent immigrants, entering between 1965 and 1970, show the highest occupation scores. In contrast, Chinese who came to this country between 1955 and 1959 show higher levels of achievement than those coming before or after that period. Koreans entering this country between 1950 and 1954 score

Table 4.13. Mean Occupation Scores For Employed Persons, By Sex, Citizenship and Year of Immigration, 1970

Sex, Citizenship and Immigration	Japanese	Chinese	Filipino	Korean	White
Male					
Native Born	.472	.506	.384	.479	.462
Born abroad of Am. parents	.469	.413	.363	.504	.513
Alien	.534	.426	.456	.700	.444
Naturalized	.408	.413	.304	.666	.455
Year of Immigration					
1965-70	.577	.388	.531	.655	.462
1960-64	.536	.495	.549	.692	.449
1955-59	.409	.583	.462	.740	.447
1950-54	.508	.382	.402	.776	.448
1945-49	.567	.460	.303	.714	.480
1935-44	.449	.370	.281	.000	.520
1925-34	.454	.281	.228	.745	.439
1915-24	.332	.320	.194	.646	.443
Before 1915	.330	.300	.175	.979	.449
Not reported	.376	.388	.326	.640	.438
Female					
Native Born	.316	.350	.272	.309	.316
Born abroad of Am. parents	.431	.290	.283	.097	.353
Alien	.217	.261	.409	.283	.262
Naturalized	.204	.284	.268	.253	.283
Year of Immigration					
1965-70	.285	.246	.417	.248	.267
1960-64	.174	.285	.321	.254	.263
1955-59	.205	.304	.309	.315	.269
1950-54	.194	.305	.277	.401	.282
1945-49	.203	.268	.247	.569	.312
1935-44	.526	.263	.376	.279	.342
1925-34	.197	.168	.209	.000	.263
1915-24	.144	.151	.100	.979	.268
Before 1915	.286	.126	.000	.212	.269
Not reported	.199	.?	.370	.281	.297

highest on occupational achievement. Thus three different periods among the four Oriental groups result in the highest levels of achievement, but all of these occurred between 1950 and 1970.

Differences in background of immigrants may explain much of the variation in levels of occupational achievement in this country. By comparing occupational achievement of the native born, many of these differences are minimized. Among native born men, only the Filipino fails to show a higher level of occupational achievement than the white. Among native born women, only the Chinese outscore the white, although Japanese and white native women are equal on occupational achievement and Koreans are not far behind white women.

MARRIAGE AND FERTILITY

Marital status and childbearing do not necessarily qualify a person for any given level of occupational achievement. Nevertheless for whatever reasons, marriage and family factors affect achievement.

Differential effects of marital status on occupational achievement of men and women are very clear. Married men living with their wives show higher levels of achievement than for any other marital statuses while never married women average higher levels than other marital statuses among women (Table 4.14). White men who have never married show a level of occupation achievement below that of married, widowed, divorced or separated white men. Widowhood, for both men and women, results in relatively low levels of occupational achievement.

Levels of occupational achievement for the Orientals are similar to those for whites for each of the several categories of marital status, and the standing of Oriental men and women relative to whites does not change greatly. Oriental men married and living with their spouses tend to improve their standing relative to comparable white men, and never married Japanese and Chinese men also gain relative to whites. All of the Oriental never married women tend to improve their positions relative to white women.

Age at marriage

In terms of occupational achievement there appears to be an optimimum age of marriage. Men whose first marriage occurred between ages 25 and 29 and women whose first marriage took place at about ages 22 to 24 tend to

Table 4.14. Mean Occupation Scores for Employed Persons, By Sex and Marital Status, 1970

Sex and Marital Status	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
Married, spouse present	.489	.463	.407	.651	.473
Married, spouse absent	.461	.262	.352	.530	.429
Widowed	.371	.282	.281	.412	.402
Divorced	.414	.392	.288	.443	.421
Separated	.409	.329	.255	.494	.409
Never married	.433	.418	.317	.451	.399
Female	.295	.298	.342	.294	.314
Married, spouse present	.284	.288	.330	.306	.312
Married, spouse absent	.271	.216	.308	.209	.303
Widowed	.249	.166	.276	.226	.291
Divorced	.270	.378	.234	.296	.310
Separated	.249	.377	.322		.265
Never married	.362	.371	.392		.344

achieve higher occupational levels than those marrying at either younger or older ages (Table 4.15). Those marrying at younger ages may have terminated or interrupted their education, which in turn tends to retard their occupational achievement. It is not clear why those who delay marrying until they are older than the average, say 35 or older, do less well in occupational achievement than persons marrying younger. Perhaps a relative lack of aggressiveness or ambition or a sense of inferiority are involved.

In any case both whites and Orientals show the same patterns of optimum ages for marrying. Chinese and Filipino men marrying at the optimum ages of 25 to 29 improve their standing relative to white men. The same is true for Chinese and Filipino women marrying at the optimum ages of 22 to 24.

Childbearing

The presence of children at home serves as an obstacle for women attempting to enter the labor market and also as a deterrent to their level of achievement. In general, the more children a woman has had the lower the level of her occupational achievement (Table 4.16). White women, for example, who have ever been married and never had a child show an average occupation score of .335, whereas the average scores decrease to a low of .236 for those with five or more children ever born. Differences in occupational achievement between those who had one child and those who have had two children are very slight. For white women there is no difference, and for Orientals only barely perceptible differences. In terms of gaining on white women, childless Chinese women show the greatest improvement in standing.

The number of preschool-age children in the home is a more direct indicator of an obstacle to participation in the labor market and perhaps to occupational achievement than the total number of children ever born. Of the total number ever born, some are away to school part of the day and mothers are at least partly relieved of motherly responsibilities. For other mothers, their children may have grown and left home, thereby removing whatever restriction their presence might have imposed. But for those with young children in the home, responsibilities of motherhood are still very demanding. Consequently, the presence of very young children is expected to lower the level of occupational achievement for young working mothers. For white mothers this is exactly what happens (Table 4.17), but for Oriental working mothers the presence of preschool children has the opposite effect. Not only do Oriental working mothers with young children show higher levels of achievement than childless women, but the more young children they have at home the higher their achievement. This may represent a cultural carry-over from the traditional Oriental pattern where "upper class" mothers had the most children.

Table 4.15. Mean Occupation Scores For Persons, By Sex and Age At First Marriage

Age at Marriage and Sex	Japanese	Chinese	Filipino	Korean	White
Male	.476	.442	.378	.600	.461
14-17	.423	.262	.314	.426	.403
18	.471	.315	.354	.368	.412
19	.411	.298	.371	.608	.426
20	.428	.317	.332	.469	.441
21	.454	.368	.354	.333	.460
22	.463	.404	.366	.492	.474
23-24	.481	.441	.407	.576	.481
25-29	.498	.515	.481	.665	.484
30-34	.495	.497	.427	.762	.464
35 or over	.426	.406	.247	.575	.425
Female	.295	.298	.342	.294	.314
14-17	.223	.156	.209	.206	.225
18	.208	.181	.243	.183	.245
19	.245	.226	.204	.259	.263
20	.229	.228	.240	.224	.288
21	.257	.265	.259	.235	.324
22	.283	.329	.301	.228	.351
23-24	.324	.395	.377	.295	.352
25-29	.298	.422	.385	.367	.347
30-34	.280	.351	.347	.302	.337
35 or over	.261	.279	.330	.272	.323

Table 4.16. Mean Occupation Scores For Ever Married Females By Number of Children Ever Born

Children Ever Born	Japanese	Chinese	Filipino	Korean	White
All ever married	.289	.300	.324	.294	.298
None	.329	.376	.369	.285	.335
One	.303	.316	.335	.300	.297
Two	.290	.312	.325	.326	.297
Three	.262	.267	.310	.284	.285
Four	.238	.223	.266	.279	.267
Five or more	.213	.182	.227	.202	.236

Table 4.17. Mean Occupation Scores For Females By Number of Children Under 6 In Household

Number of Children Under 6	Japanese	Chinese	Filipino	Korean	White
None	.275	.300	.301	.265	.307
One	.316	.338	.335	.303	.291
Two	.342	.347	.353	.346	.292
Three or more	.356	.398	.314	.385	.278

DISSIMILARITIES IN OCCUPATION AND INDUSTRY

Oriental workers are not distributed among major occupation and industry groups in the same ways as whites, and yet their overall levels of occupational achievement compare favorably with white workers.

The index of dissimilarity is a useful way of indicating how much inequality exists, but the occupational and industrial distributions themselves must be examined in order to help interpret the meaning of an index value (Table 4.18). The occupational index for Chinese men (.343) is almost identical to that for black and white men (.349). However, black men are much more heavily concentrated in operatives, and much less clustered in professional, managerial and sales occupations than Chinese men. Consequently, the dissimilarity index between black and Chinese men is .470. The occupational distributions of blacks and Chinese differ at about the same magnitude from whites, but the specific occupations which produce the differences are not the same. Chinese men, for example, would have to move "down" from professional occupations and black men "up" to professional jobs, if both are to move toward equality with white men.

The shift toward less inequality in occupational distributions between whites and Orientals was generally rather slight between 1965 and 1970. The occupational distribution of Filipino women showed the most marked shift toward the distribution of white women, while Koreans appear to move further in the direction of inequality with whites.

Unequal distributions of Orientals in comparisons with whites among major industry groups are not especially large. Among men the degree of dissimilarity by industries is about the same as for occupations. Japanese women are distributed among industry groups more nearly like white women than is true for Japanese men and white men. Other Oriental women also come closer to approaching the industrial distribution of white women than is true for their male counterparts.

In sum, the occupational and industrial distributions of Orientals are not greatly different from those for whites, as indicated by the index of dissimilarity. However, to bring about more nearly equal distributions many Orientals would have to move "downward" in the occupational structure. There is slight evidence that discrepancies between occupational and industrial distributions of Orientals are becoming more like those for whites for the period from 1965 to 1970.

Table 4.18. Occupation and Industry Dissimilarities Between Orientals and Whites By Sex

Sex, Occupation and Industry	Japanese	Chinese	Filipino	Korean
Male				
Occupation, 1970	.126	.343	.307	.312
Occupation, 1965	.133	.351	.319	.304
Industry, 1970	.162	.319	.215	.251
Industry, 1965	.167	.359	.275	.295
Class of worker, 1970				
Under 30	.066	.096	.094	.036
30-49	.109	.106	.096	.048
50-69	.122	.128	.180	.239
Female				
Occupation, 1970	.064	.140	.183	.254
Occupation, 1965	.048	.146	.263	.231
Industry, 1970	.104	.048	.182	.090
Industry, 1965	.120	.074	.271	.212
Class of worker, 1970				
Under 30	.122	.120	.069	.069
30-49	.125	.129	.098	.078
50-69	.073	.144	.079	.165

Sex Dissimilarities in Occupations and Industries

It is difficult to argue the Orientals are discriminated against when it comes to occupational achievement, since they compare so favorably with whites. Nevertheless, there is a strong indication that sex discrimination prevails among Orientals. As many as a third to a half of all Oriental women would need to shift into predominantly male occupations to remove inequalities between the sexes in occupational distribution (Table 4.19). In 1970, the D-index value for Japanese men and women was .492. Japanese women are most underrepresented in comparison with Japanese men in professional managerial, crafts and laboring occupations, while they were overrepresented in clerical, operatives and service occupations. For Chinese men and women the D-index was .361, suggesting a shift of Chinese women from clerical and operatives occupations into other occupations. Filipino and Korean women were also clustered heavily in clerical occupations, as were white women. White and Filipino women, however, were predominant over men at the professional level. The D-index for Korean men and women was also a rather high .485 in 1970, largely because of the heavy concentrations of Korean women in clerical and service jobs.

Sex dissimilarities along the lines of major industry groups were less pronounced than for occupation groups in 1970. Even on this basis, however, Oriental women would need to shift in substantial numbers across industry lines in order to move toward equality with men. As with white women, Japanese, Chinese and Filipino women were relatively numerous in professional service industries. In contrast, Korean women outnumbered men in wholesale and retail trade and in personal service industries.

SUMMARY

The inescapable conclusion that workers with an Oriental heritage are highly successful in the American labor market requires elaboration and modification on the basis of differences among Oriental workers. Despite an admirable overall record of occupational achievement, there are a number of notable variations between groups of Oriental workers. Not all Orientals are alike in their preparation for work, in the kinds of jobs they hold, nor in their levels of achievement. Such differences appear in two kinds of comparisons: between white and Oriental workers by sex and between men and women for each of the Oriental groups.

Japanese men and women are more nearly like white men and women in the kinds of occupations and in the levels of occupational achievement.

Table 4.19. Sex Dissimilarities Among Orientals and Whites

Occupation and Industry	White	Japanese	Chinese	Filipino	Korean
Occupation, 1970	.434	.492	.361	.345	.485
Occupation, 1965	.431	.497	.350	.383	.388
Industry, 1970	.318	.295	.209	.346	.254
Industry, 1965	.312	.300	.209	.370	.252
Class of worker, 1970					
Under 30	.065	.156	.109	.059	.090
30-49	.104	.132	.095	.098	.067
50-69	.140	.208	.162	.124	.269

The degree of similarity is so great that Japanese workers are hardly distinguishable from white workers except for their heritage. Average levels of achievement for Japanese are very similar to those for white men and women. Japanese men are more likely than white men to be in professional occupations, but otherwise differences in occupational distributions are slight.

Chinese men and women average almost as high levels of occupational achievement as whites. However, Chinese men differ from white and most other groups of men as a result of their polarization into relatively high and low occupations, as reflected by their distinct concentrations in professional and service occupations. The types of occupations and levels of achievement of Chinese women are much like those for other relatively successful women. They are most often employed in professional, clerical, operative and service occupations.

Filipino occupational achievement differs from other Orientals. Filipino men on the average rank below Koreans, Japanese, and Chinese as well as white men. This generally low level of achievement--low among Orientals but not in comparison with black or Spanish origin workers--is chiefly a consequence of their employment in low-ranking occupations such as service work, farming and as operatives, which together account for about 40% of all their employment. Filipino men are also polarized, although to a lesser extent than Chinese men, since they have a relatively high number employed as professionals. Filipino women average a higher level of achievement than white or other Oriental women in this study, and this is a consequence of their greater degree of employment as professionals.

Koreans represent a pattern quite the opposite of Filipinos since Korean men are the highest in occupational achievement and Korean women the lowest. The proportion of Korean men in high-ranking occupations--professional and managerial occupations--is phenomenally high (over half). Korean women too are disproportionately employed in professional jobs, but this is more than offset by the fact that a majority of Korean women are in some of the lowest ranking occupations.

Similarities in the occupational distributions of Japanese and white men are emphasized further by examining the ten specific jobs in which each are most often employed. Eight of these ten jobs are duplicated between Japanese and white men. Filipino and Korean men differ from Japanese in this pattern, but Chinese men overlap Japanese in only one specific job. Among women, there is considerably more homogeneity as the four Oriental groups and white women duplicate each other in five of the ten jobs employing the largest numbers.

The sharpest of all contrasts is between the occupational achievements of men and women. On the average, none of the groups of Oriental or

white women come up to the occupational levels of men. To a great extent this is a consequence of the employment of women in clerical, semiskilled, and service occupations, or in low-ranking jobs customarily defined as "female jobs." But even where they are employed in a generally high occupational category, women appear most frequently at lower ranks. Thus, among professional occupations, for example, women tend to be employed as elementary school teachers rather than at the secondary or college levels.

One of the most striking observations is the narrowing of the achievement gap for workers with college educations. Although differences in achievement are not large between Oriental and white, there are indications that Oriental workers with relatively low levels of educational attainment lag behind the achievements of comparable white workers. Among college graduates, differences in levels of achievement diminish sharply. Not only does the achievement gap narrow among men and among women considered separately, the gap between the sexes also narrows at higher education levels.

Occupational achievement is related to industry of employment and to class of workers. Highest levels of achievement occur in professional service, finance, insurance and real estate industries. Among Oriental workers the pattern is somewhat more variable than consistent as to whether they gain relative to whites by virtue of employment in a particular industry. Relationships between achievement levels are not greatly affected by class of workers, but those employed by governmental agencies typically reach higher occupational levels than those employed in private business.

Work on a full- or part-time basis should influence level of occupational achievement since earnings are dependent on the amount of time worked. With each increment in weeks worked in 1969, occupation scores of men increased as expected. However, for women, highest levels of achievement occur for those who worked only part of the year, 40 to 49 weeks. Japanese, Chinese and Korean men reach about the same level of achievement as white men if they work a full year. Filipino and Korean women surpass white women among full-year workers.

Unlike the increase in occupation scores with increased weeks worked, occupational levels do not necessarily rise with the number of hours worked per week. For men, working between 35 and 40 hours results in higher achievement than working either shorter or longer hours, but for women there does not seem to be a single optimum number of work hours. At the optimum amount of work hours, Oriental men reach higher occupational status than white men.

Among white workers, native born whites attain higher levels of occupational status than naturalized citizens or aliens, but among Oriental workers only Chinese women show this pattern. Otherwise, the relationship between achievement and citizenship is rather mixed.

Married men living with their spouses reach higher levels of achievement than other men, but for women those not married average the highest achievement. Thus the effects of marital status on occupational achievement are consistent and clear, but they do not materially alter the relative positions of Orientals and whites.

As with marital status, age at first marriage shows an influence on occupational achievement, but it does not particularly modify the relationships between achievement levels of Orientals and whites. Marriage between the ages of 25 and 29 is most conducive to higher achievement for men, while women achieve higher status if their first marriage took place at ages 22 to 24.

Childless women generally participate in the labor force more frequently and achieve higher occupational status than mothers. The difference between having born one or two children, however, shows little effect on occupational achievement.

One of the more unique patterns among Orientals appears when the number of preschool children are related to occupational achievement. The tendency for levels of occupational achievement of Oriental women to be higher as the number of young children at home increase is a distinctly Oriental pattern which may represent a cultural carry-over from the ancient Oriental family system in which upper status women had the most children.

CHAPTER 5

STATUS GAINS THROUGH OCCUPATIONAL MOBILITY

Oriental workers had reached comparatively high occupational levels in the United States by 1970. Since the 1940's Chinese, Japanese, and Filipinos too, have overcome barriers that had previously blocked their occupational achievement. As the most recent Oriental immigrant group, Koreans are an extremely fortunate and select group who have been spared the attacks of the earlier anti-Oriental movements. Early Chinese and Japanese immigrants were relegated to the lowest occupational levels, and the strong attitudes behind the anti-Oriental movement, which gained momentum during the 1880's, are summed up (Lyman 1974:62) by the stereotype of the Chinese,who were depicted as servile laborers, unfair competitors, vicious in their ethics, immoral in their conduct, contagious and disease ridden, and finally as unassimilable. Vestiges of this sentiment undoubtedly remain,but after World War II a new generation of Oriental Americans has emerged--one that is largely middle class.

The primary purpose of this chapter is to examine the dynamics of the occupational structure, conditions that influence the occupational mobility of Oriental workers, and the consequences of these for achievement at destination occupations. The dynamics of the occupational structure involve flows of manpower between occupations, and a central concern in this study is whether or not these movements reflect discrimination. A major means for making such inferences is, of course, subgroup comparisons between persons "equally well qualified." However, part of the flow of workers between occupations is a consequence of changes in the occupational structure itself and may have little connection with qualifications, because structural change is essentially beyond the control of individual workers or even groups of workers. On an aggregate basis, it is important nevertheless to determine whether occupational moves that are "forced" by changes in the occupational structure are equally distributed among Orientals, between Orientals and whites, and between men and women.

A second purpose is to examine elements and components of mobility as they relate to the relative equality or discrimination of occupational movers. One way of viewing mobility is through the origins and destinations of mobile workers. The chances of moving are partly determined by the occupation one happens to hold, and the level and nature of an occupational destination are influenced also by the level and nature of an origin occupation. Occupational destinations for mobile workers represent a level of ultimate achievement at a particular point in the work life cycle--an end product

of a life-long process and an outcome of the dynamics of occupational mobility in the recent past.

Occupational origins and destinations of mobile workers are instrumental in determining the direction and distance of mobility. Once values have been assigned to occupations to indicate their position in the occupational hierarchy and these values assigned also to workers, the direction and distance components of mobility can be ascertained. Occupation scores, as discussed in the previous chapter, provide the necessary basis for investigating both direction and distance. The stage is set now for determining whether there are differences in mobility and also for examining some of the factors that influence movements between occupations.

THE INCIDENCE AND EFFICIENCY OF MOBILITY

Movement between occupations is not a rare event in the United States, since about a third of all workers in 1965 were in a different job in 1970. Operationally, occupational mobility is defined as a difference between occupations reported for 1965 and 1970, or alternatively as a difference in occupation scores for the two points in time. There is no way of knowing how many occupations a worker may have held during this five-year period or whether a worker in 1970 may have returned to his origin (1965) occupation after having made one or more changes. The census data show the net results of moves, but it is necessary to assume that multiple moves and returns to an origin are relatively infrequent and evenly distributed among workers.

Korean men were more mobile than other Oriental men, but among Oriental women Filipinos were most mobile (Table 5.01). White workers employed in 1965 and 1970 were among the most mobile, with 37% of white men and women employed at both dates moving to a different occupation among the some 400 occupations included in the census detailed list of occupations. Japanese and Chinese men and women are less mobile than Filipino and Korean workers, and the relatively low mobility for the Japanese in comparison with whites represents one of the infrequent instances of differences between the two groups.

Differences in the incidence of mobility between men and women are not the same across all four groups of Orientals. Korean and Chinese men are more mobile than Korean and Chinese women, but the reverse is true for Japanese and Filipinos.

Table 5.01. Incidence of Mobility Between Occupations, by Sex and Age*

Sex and age	Japanese	Chinese	Filipino	Korean	White
Male					
Employed	3,114	2,254	1,598	205	653,650
Percent mobile,					
1965-70	28.9	30.0	34.1	34.6	37.1
Under 35	43.8	46.0	51.7	38.7	55.1
35-49	25.9	27.8	36.2	38.1	34.0
50-69	24.8	22.9	23.6	17.2	28.2
Female					
Employed	2,398	1,168	844	197	358,964
Percent mobile,					
1965-70	32.6	28.7	41.4	34.0	36.8
Under 35	38.9	37.0	42.2	34.8	45.8
35-49	32.3	25.7	41.5	36.4	35.3
50-69	26.6	23.4	36.7	21.0	31.0

*Each of the Oriental groups constitute a 3% sample and the whites a 2% sample of workers employed in 1965 and 1970.

Mobility is defined as a difference in the 3-digit occupation codes for 1965 and 1970.

It is not surprising that occupational mobility is more prevalent at the younger than at the older ages. More than half of Filipino and white men under 35 years of age in 1970 were in different jobs than they were in 1965, whereas only about a fourth of these men were mobile at ages 50 to 69. The only exception to the declining incidence of mobility with age occurs for Korean women, where those at ages 35 to 49 are slightly more mobile than younger or older Korean women. Although the movement of workers subsides among older workers, the fact remains that roughly a fourth of all workers 50 to 69 years of age who were employed in 1965 and 1970 were in different occupations by 1970.

Efficiency of Mobility

The movement of workers between occupations is relatively efficient when the number of workers moving to and from an occupation is about the same as the net change for that occupation. Comparisons of the efficiency of occupational mobility (Table 5.02) show considerable variation in degrees of efficiency. Japanese men moving to and from craft occupations required a total of 91 moves (in and out) to accomplish a net change of one additional Japanese male in the crafts. Nearly as inefficient were Japanese women moving to and from operatives jobs, where a total of 77 moves were necessary to yield a net change of one less Japanese woman. In general, the movement of women between operative and other occupations shows the most consistent pattern of inefficiency; relatively large numbers of moves were made by white and Japanese women only to result in a net loss in operatives. Chinese and Filipino women also moved most often between operative and other occupations, but they achieved an increase as a consequence. Aside from movement involving farm and private household service work, Oriental women were relatively efficient in their moves for sales, clerical and laborer occupations.

Oriental men were also relatively efficient in their moves between service and other occupations, as they were for operatives, transportation equipment operatives and laborer occupations. Occupationally mobile white men, in contrast, made 28 moves for service occupations and 37 for transportation equipment operatives in order to produce a one-person change.

Overall, Oriental workers moving between occupation groups between 1965 and 1970 were no less efficient than white mobile workers. White men, for example, required 10 or more moves to produce a unit of change in six of the twelve major occupations. White women show 10 or more on the efficiency measure in four of the occupation groups and are typically less efficient in their moves than Oriental women.

Table 5.02. Efficiency* of Occupational Mobility for Orientals and Whites, by Sex and Occupation

Sex and Occupation	Japanese	Chinese	Filipino	Korean	White
Male					
Professional	13.2	9.4	-7.3	4.5	12.0
Managerial	3.9	-26.3	-15.0	3.0	5.4
Sales	-26.5	-13.4	-4.5	-2.6	-19.4
Clerical	-8.7	47.0	3.4	-1.4	40.2
Crafts	91.0	3.6	3.1	1.5	10.3
Operatives	-8.2	-4.0	-5.6	-2.5	-8.7
Transp. equip.	-5.0	3.4	-6.6	-3.0	-37.3
Laborer	-9.0	-2.8	5.9	---	-4.6
Farmer	-2.5	-1.7	-1.0	---	-2.4
Farm laborer	-4.6	---	-2.4	---	-4.6
Service	6.4	6.6	5.5	5.0	27.7
Private house.	---	---	5.0	---	-8.1
Female					
Professional	12.7	-6.5	-1.5	0.0	11.2
Managerial	5.3	-10.3	-5.0	-3.0	14.4
Sales	-4.0	-5.0	2.6	---	-7.8
Clerical	0.0	-3.2	2.4	-6.3	13.6
Crafts	23.0	-5.0	0.0	-1.7	9.2
Operatives	-77.0	22.0	39.0	2.7	9.6
Transp.equip.	---	---	---	---	8.7
Laborer	0.0	-3.7	-5.0	---	-8.0
Farmer	-1.8	---	-1.0	---	-1.4
Farm laborer	7.0	---	-1.3	---	4.9
Service	26.5	-4.4	2.4	19.0	-8.9
Private house.	0.0	2.3	9.0	---	7.4

*The number of movers to and from an occupation to produce a change of one. Minus (-) sign indicates a loss due to mobility.

The number of moves to and from an occupation in order to produce a gain or loss of one worker can be interpreted in a rather simple and straightforward manner as the degree of efficiency in occupational mobility for producing either a unit gain or loss in an occupation. However, less clear are the conditions which contribute to varying degrees of efficiency in mobility. There are several plausible interpretations. First, a high degree of inefficiency in mobility may be attributed to factors associated with an occupation. This does not appear to be the case as evidenced by this data. The operative category might be the most suspect because of the high turnover for women, but for men in operative jobs the inefficiency of movement is not especially high. None of the other occupation categories shows a consistently high or low degree of efficiency.

Second, a high degree of efficiency might be attributed to particular subgroups of workers. This view is partly supported by the data since white and Japanese mobiles are relatively inefficient in their movements. Filipino and Korean workers, in contrast, appear to be relatively efficient at job mobility, with Chinese somewhere between the extremes.

Third, the degree of efficiency in occupational mobility may reflect differences in opportunities and work conditions specific to an occupation and a subgroup of workers. Opportunities for operative jobs have increased for women and there is a high rate of turnover. Employment in farming has declined and mobility is relatively efficient for farm occupations. However, opportunities for employment in craft occupations have not generally increased greatly, but Japanese men and women are rather inefficient in their mobility to and from craft jobs.

These speculative interpretations are suggestive of possible explanations for the efficiency of mobility, but clearly there must be more intensive probing with different kinds of data before satisfactory answers on variations in efficiency are forthcoming.

STRUCTURAL CHANGE AND MOBILITY

Part of the interchange of workers among occupations is a result of changes in the occupational structure. Forced mobility occurs when the number of workers in an occupation in 1970 is smaller than in 1965. An inevitable consequence of such a decrease is the movement of some number of workers either to another occupation, to the ranks of the unemployed or out of the labor force. Largely for the sake of simplicity, the occupational structure is treated here as a closed system, i.e., only workers employed in both 1965 and 1970 are considered. Therefore,

workers forced from one occupation must be located in another occupation by 1970. Workers who left the ranks of the employed, for whatever reason, are ignored in the following discussion but ultimately must be accounted for in a more comprehensive investigation of forced flows of manpower.

Among all occupationally mobile workers in the United States, including all heritages, colors and both sexes, 10% were forced to move between major occupation groups between 1965 and 1970 (Table 5.03). As often happens, this national average is misleading since there is considerable variation among Orientals and whites by sex. If the impact of forced mobility were evenly distributed throughout the employed population, each subgroup of movers would have about the same degree of forced mobility.

The evidence suggests very strongly that decreases in the numbers of persons among occupations is highly selective with respect to color-ethnic-sex characteristics: 42% of Filipino female movers were forced to different occupations because of reductions in the numbers of Filipino women in specific occupations, while only 8% of Japanese women and 9% of white women were compelled to move. The impact of forced mobility was high also for Korean men (39%), whereas only 11% of white male movers were forced to different occupations. In general, the incidence of forced mobility tends to be highest among Filipinos and Koreans and lowest for white, Japanese and Chinese movers, and men are more subject to forced movement than women. However, these general patterns are not consistent throughout the color-sex minorities. Chinese women are more subject to forced moves than Chinese men, but the reverse is true for Japanese men and women.

It is abundantly clear that forced occupational mobility is unequally distributed, and that Koreans, Filipinos and Chinese bear a disproportionate share. Viewed as inequality in opportunities for "free" mobility, (i.e., not forced by changes in the occupational structure) there can be little doubt that some are more unequal than others. Although it should be emphasized that the majority of occupational moves are free, it is also likely that the true incidence of forced movement is greater than indicated here. If a more detailed list of occupations were examined and groups were further subdivided by such factors as age, industry and region, the incidence of forcing would reflect even greater disparities than those shown in Table 5.03. Finally, reduction of color-sex discrimination in forced mobility would help minimize the burdens of decreased employment opportunities for groups now exposed to a high risk from changes in the occupational structure. In view of the generally high educational and occupational achievement levels of Oriental workers, it is difficult to conclude that they have not been subject to undue exposure to changes in the occupational structure.

Table 5.03. Structural Mobility Under Alternative Conditions

Oriental, white and sex	Percent of movers forced
Open competition:	
All workers	10.0
Sex segregation:	
Male	11.0
Female	8.7
Oriental and white segregation:	
Japanese	11.0
Chinese	12.4
Filipino	27.9
Korean	18.6
White	10.1
Sex and Oriental-white segregation:	
Japanese: male	13.1
female	8.1
Chinese: male	14.7
female	20.5
Filipino: male	23.3
female	42.0
Korean: male	39.0
female	20.0
White: male	11.2
female	9.2

Differences in Direction of Occupational Mobility

The American Dream of "getting ahead" tends to persist, but many workers are doomed to disappointment since the chances for downward mobility are about as great as the prospects for upward mobility. Substantial numbers of Oriental and white men whose occupation scores changed between 1965 and 1970 experienced a decrease in occupational status, although more than half showed a gain in status (Table 5.04). In contrast, fewer than half of the job-mobile women succeeded in moving to higher positions.

Korean men and women are more likely to move ahead in the occupational structure than other Oriental and white movers. Two-thirds (66%) of Korean job-mobile men moved upward on the occupation scale. The proportions of upwardly mobile workers among movers show also that white men ranked second behind Koreans, while Japanese, Chinese and Filipinos follow, in that order. Filipinos, both men and women, were the least upwardly mobile; half of the Filipino men and only a third of the Filipino women went upward in occupational status.

The incidence of upward mobility typically declines with age, but Filipino men depart from this pattern. For young Filipino men, under 35 years of age, 44% were upwardly mobile, whereas for those 50 to 69 years of age, 58% were upwardly mobile. Filipino women at the oldest ages contrast sharply; only 18% moved upward. The high incidence of upward mobility for Korean men is underscored by the youngest Korean men. Three-fourths of mobile Korean men under 35 years of age moved up the occupation scale.

The great majority of changes in occupation, as measured by differences in occupation scores for 1965 and 1970, result in vertical shifts. In passing, it can be noted that part of the occupational movement is essentially horizontal, i.e., a change in occupational category without a change in occupation score. For Oriental and white men, this lateral shifting amounted to about 1-2% of all occupational changes. For women, horizontal movement is slightly more frequent. About 8% of the Korean women whose job categories changed failed to show a change in occupation score. This is much higher than the incidence of horizontal movement for Chinese and Japanese women (3%). For white women the rate of horizontal moves was 2.5%. Differences among Orientals and between Oriental and white are comparatively small, but horizontal movement is more frequent for women than for men.

Table 5.04. Percentages of Mobile Workers Moving Upward by Sex and Age*

Sex and age	Japanese	Chinese	Filipino	Korean	White
Male	56.1	51.7	50.0	65.7	59.8
Under 35	67.4	60.0	44.0	75.9	64.5
35-49	54.4	49.6	49.0	61.1	59.7
50-69	47.1	44.3	58.0	---	53.8
Female	45.3	43.1	34.5	51.6	47.2
Under 35	52.4	45.2	35.6	52.6	52.9
35-49	46.3	43.2	37.1	42.8	48.3
50-69	31.4	38.9	18.2	---	39.5

*Figures based on changes in occupation scores between 1965 and 1970.

Distance and Direction

Levels of ultimate occupational achievement are influenced by the incidence of mobility, the direction of occupational moves and also by the distance of movement. It is generally conceded that most occupational mobility covers relatively short distances upward or downward in the occupational structure. It can be expected that most moves are between occupations closely related in terms of skill levels and relative standing in the hierarchy. Moves between the most skilled professional occupations and highly unskilled manual occupations are understandably rare. Much more likely are moves between highly similar jobs, such as between sales and clerical jobs or unskilled and semiskilled manual jobs.

The distance covered in occupational mobility has received little attention in most studies, largely because of the lack of adequate measures. With the development of occupation scores to measure occupational status and prestige, possibilities for describing and assessing the distance component of occupational mobility now appear feasible. Based on the occupation scores developed for this study, methods were developed for determining the distances of occupational moves upward and downward. As a preliminary, scores assigned to an occupation in 1970 were used to assign occupation scores to workers employed in both 1965 and 1970. It is reasonably safe to assume that the standing of occupations themselves did not change much during this relatively short period of time. Once workers were assigned occupation scores for the two dates, it became a simple matter to determine such things as differences in occupation scores between 1965 and 1970.

A more refined measure was sought, however, since an occupation score in 1970 is heavily dependent on a worker's level of achievement five years earlier. A measure of one aspect of the distance moved, a Relative Mobility Score (RMS), appears to solve many of the measurement problems. (See Appendix A for a more detailed discussion). RMS represents the fraction of the maximum possible distance, upward or downward, regardless of the level of an origin occupation. RMS can vary from a maximum of +1.0 or -1.0, depending on direction of movement, and zero. Nonmovers, of course, would have a score of zero, and movers are assigned RMS values in accordance with the fraction of the distance moved. RMS has the advantage of permitting comparisons among movers while controlling for differences in levels of origin (i.e., 1965 occupation scores). A worker whose occupation score in 1965 was .50 moves half the distance toward the highest occupation score if he attains a score of .75 by 1970. Similarly, a worker whose occupation score changes from .20 to .60 moves half of the possible distance upward. The same kind of interpretation can be made for downwardly mobile workers. A worker whose occupation score decreases from .60 to .30 moves half of the distance toward the bottom of the occupational structure.

For upwardly mobile workers, results show that (1) Korean, Chinese and Japanese men and women move further toward the top occupations than white men and women while Filipinos average the shortest distances upward and (2) men move greater distances toward the top than women (Table 5.05). Korean men have the highest average occupation scores,and they also show the greatest distance upward in their mobility, with an average RMS of .382, indicating that they succeed in moving more than a third of the possible distance upward. Chinese and Japanese men also move upward relatively great distances, with average RMS's of .357 and .325,respectively. Upward distances for Filipino and white men are about the same, with RMS's of .270 for Filipino and .281 for white men. Upwardly mobile Oriental women show much the same general pattern as their male counterparts, with Korean women moving the greatest distances and Filipino women the shortest distances upward. Given the lower average levels of occupational achievement for women, the fact that women average shorter distances toward the top of the occupational structure takes on added significance. If continued for long, this pattern will contribute not only to the maintenance of sex differences in occupational achievement but also will assure higher levels of achievement for men. Upwardly mobile Japanese women, for example, moved only about a fourth of the way toward the top whereas Japanese men moved about a third of the distance upward.

Among downwardly mobile workers, results show that (1) Chinese, Filipino and Japanese men drop the furthest toward the bottom of the occupational scale while Korean men lose slightly less in standing than white men, (2) Korean women, however, drop an amazing 65% of the distance downward, white women and Japanese, Chinese and Filipino women nearly half of the distance toward zero, (3) women average longer distances downward than men, and (4) the average distances downward are greater than distances upward. A net result of both the up and down distance patterns further accentuates the unfavorable mobility pattern for women, who move shorter distances upward and longer distances downward than men.

INFLUENCES ON MOBILITY: EDUCATION, CITIZENSHIP AND CHILDREN

Education

Higher levels of educational attainment are favorable not only for higher levels of occupational achievement, as noted in the previous chapter, they are also favorable for higher degrees of upward mobility and serve as a deterrent to downward mobility. This is illustrated clearly by the upward

Table 5.05. Mean Relative Mobility for Orientals and Whites, by Sex and Direction

Direction of mobility	All	Male	Female
Upward			
Japanese	.300	.325	.264
Chinese	.334	.357	.278
Filipino	.256	.270	.223
Korean	.346	.382	.289
White	.270	.281	.242
Downward			
Japanese	.404	.348	.456
Chinese	.456	.442	.481
Filipino	.413	.387	.444
Korean	.508	.310	.652
White	.403	.340	.491

and downward mobility of Japanese men (Table 5.06). Upwardly mobile Japanese men, 14 to 34 years of age, who were high school graduates, moved about a quarter of the distance toward the top of the occupation structure, while those with four years of college moved 40% of the distance toward the top. For downwardly mobile Japanese men at the same ages, high school graduates dropped 29% of the way toward the bottom of the occupation structure, but those who had graduated from college showed a decrease in achievement level of 27%. The same kind of pattern is found for Chinese and white men at the ages of 14 to 34 and 35 to 49. Departures in this pattern for Filipino and Korean men may be attributed in part to relatively low numbers of mobile men, especially at specific age and education levels.

Among men who had completed four years of college, those who were upwardly mobile moved a greater distance toward the top than those who were downwardly mobile moved toward the bottom. Hence, the contribution of a college education is relatively strong for upward moves as are the downward deterrent influences. This is not the case for men with twelve years of high school, since those moving upward moved shorter distances than those moving downward in the occupation structure.

In comparison with white men, Japanese and Chinese show a tendency to move greater distances at each educational level. Japanese and Chinese high school graduates, who moved upward, for example, moved a slightly greater distance than similar white men. Downwardly mobile Chinese men, however, also tended to move a greater distance downward than comparable white men.

Among all of the upwardly and downwardly mobile men, none of the Orientals consistently move greater distances in either direction than white men when educational attainment is controlled. Japanese high school graduates, 14 to 34 years of age, move upward a slight distance further than white males, and those moving down the occupation scale do not move quite as far downward as comparable white men. However, at ages 35 to 49, this pattern is reversed for Japanese and white high school graduates. Chinese high school graduates move further upward and downward at both age levels than comparable white men.

Occupationally mobile women also benefit from the upward stimulation of higher education and the retarding effects of higher education on downward mobility. Mobile women, however, ascend shorter distances and descend longer distances than men. With various exceptions at different levels of educational attainment, Japanese and Chinese mobile women fail to move upward as far as white women and they also tend to move further downward than white women (Table 5.07). Young Japanese college graduates, for example, move as far upward as comparable white women, but those moving downward drop a greater distance than white women. In general, although

Table 5.06. Mean Relative Mobility of Oriental and White Men, 14-49 Years of Age, by Direction of Mobility and Education

Age, direction and years of school completed	Japanese	Chinese	Filipino	Korean	White
14-34					
Up					
H.S.: 12	.277	.341	.252	.139	.255
College: 1-3	.355	.425	.269	.419	.339
4	.404	.529	.452	.447	.454
5 or more	.643	.585	.568	.337	.531
Down					
H.S.: 12	.292	.510	.293	---	.300
College: 1-3	.286	.449	.329	.404	.309
4	.272	.256	.449	.682	.269
5 or more	.398	.148	.401	.167	.247
35-49					
Up					
H.S.: 12	.249	.304	.286	.492	.271
College: 1-3	.364	.323	.282	.374	.332
4	.429	.389	.469	.311	.392
5 or more	.503	.426	.537	.425	.468
Down					
H.S.: 12	.350	.425	.359	.120	.319
College: 1-3	.325	.400	.437	.104	.313
4	.379	.324	.294	.387	.269
5 or more	.199	.223	.454	.265	.259

Table 5.07. Mean Relative Mobility of Oriental and White Women, 14-49 Years of Age by Direction of Mobility and Education

Age, direction and years of school completed	Japanese	Chinese	Filipino	Korean	White
14-34					
Up					
H.S.: 12	.206	.162	.150	.168	.203
College: 1-3	.209	.231	.118	.232	.270
4	.509	.390	.403	.400	.506
5 or more	.470	.491	.346	.789	.514
Down					
H.S.: 12	.357	.405	.397	.654	.401
College: 1-3	.316	.542	.403	.651	.396
4	.457	.470	.465	.666	.391
5 or more	.450	.316	.410	.512	.354
35-49					
Up					
H.S.: 12	.219	.254	.141	.378	.224
College: 1-3	.268	.263	.088	---	.283
4	.384	.421	.337	.317	.421
5 or more	.374	.731	.693	.949	.476
Down					
H.S.: 12	.443	.431	.483	.480	.430
College: 1-3	.445	.331	.473	.680	.424
4	.355	.518	.438	.840	.391
5 or more	.368	.440	.332	---	.301

education appears favorable for the direction and distance of mobility, the intergroup comparisons fail to yield an entirely consistent pattern of the kind where Oriental women are invariably better or worse off than white women.

Citizenship

A number of counterbalancing factors among workers with an Oriental heritage come to bear on their occupational mobility, and their nativity and citizenship status are among these factors. On the one hand, it might be expected that occupationally mobile native Americans of Oriental heritage should be more successful in moving upward in the occupation structure on the grounds that native born workers are more completely assimilated than the foreign born. However, recent immigrants from the Orient tend to be more highly educated and younger than natives with an Oriental origin, and therefore, can be expected to be more upwardly mobile.

The net influence of nativity and citizenship on distances and direction provides a mixed picture. Among upwardly mobile native Americans of Oriental heritage, Japanese and Chinese men move longer distances than comparable white men, and Japanese, Chinese and Korean women also move further upward than native white women (Table 5.08). Naturalized upwardly mobile Chinese and Korean men also move further toward the top than naturalized white men, but among women only naturalized Japanese move further upward than naturalized white women. All four of the Oriental groups of men and women classed as aliens show greater distances of upward mobility than alien white men and women. Therefore, upwardly mobile Oriental alien workers are relatively successful in moving up the occupational ladder.

Among downwardly mobile Oriental workers, however, the native born do not lose as much in occupational standing as the naturalized and alien Oriental. Alien Chinese men, for example, descend over half of the distance toward the bottom of the occupation scale, and Filipino and Korean downwardly mobile aliens drop about 40% toward the bottom. Native Chinese men moving downward drop only 28% of the distance downward. Native Japanese men and women show a similar pattern, with the native born slipping to a lesser degree than the foreign born.

In comparison with white mobile workers, Japanese and Chinese upwardly mobile alien and native men do at least as well as white alien and native men, but downwardly mobile Japanese and Chinese alien men drop further down the ladder than alien white men. Japanese women move

Table 5.08. Mean Relative Mobility for Orientals and Whites Under 35 Years of Age by Sex

Sex, direction and citizenship	Japanese	Chinese	Filipino	Korean	White
Male					
Up					
Native born	.345	.421	.273	.199	.285
Naturalized	.225	.435	.243	.416	.310
Alien	.450	.458	.379	.400	.296
Down					
Native born	.261	.279	.296	---	.295
Naturalized	.286	.385	.396	.302	.325
Alien	.364	.545	.407	.413	.304
Female					
Up					
Native born	.299	.294	.158	.352	.251
Naturalized	.292	.239	.155	.240	.242
Alien	.262	.352	.254	.314	.255
Down					
Native born	.340	.438	.383	.835	.414
Naturalized	.513	.487	.384	.630	.412
Alien	.504	.451	.430	.733	.482

further upward than white women whether they are native born or not, but naturalized and alien Japanese women descend further than comparable white women. Upwardly mobile Chinese women, especially aliens, move further upward than white women. Filipino men and women do not generally move as far upward as whites, but neither do they slip downward as much. Downwardly mobile Filipino foreign born men, however, tend to drop downward further than foreign born white men. Korean mobile workers move greater distances upward than whites, but if they move downward they tend to drop relatively great distances.

Children and Mobility

Since the presence of children at home influences levels of occupational achievement, as seen in the last chapter, it is expected that the occupational mobility of working mothers also may be influenced by their children.

At ages 25 to 44, upward mobility is inversely related to the number of children ever born for white women (Table 5.09). White women with no children ascend about 30% of the distance toward the top; the distance upward decreases with each additional child born until for those who have had five or more children movement is only about 21% of the distance toward the top of the occupation scale. A similar pattern occurs for white women at ages 35 to 44 and for Japanese women in the younger age group. However, for Japanese in the next older age group, 35 to 44, the pattern is irregular, with mothers of two, four and five or more children moving upward a longer distance than childless Japanese women; Japanese mothers of one and three children move shorter distances. Chinese women, especially at the ages of 25 to 34, depict the opposite pattern, with mothers of one and two children moving a longer distance upward than childless Chinese women. At the next older ages, however, even Chinese women show a mixed pattern. For Filipino and Korean women, the patterns are not clear and distinct. In general, among upwardly mobile white women the births of additional children serves as a deterrent to upward mobility, whereas for Chinese women the evidence appears to be the opposite. The Japanese pattern resembles that for white women, but not distinctly so.

The number of children born also appears to influence the distance downward in the occupation structure among mobile women. Generally, the larger the number of children ever born, the longer the distance downward. With some exceptions, the mobility patterns of Japanese, Chinese, Filipino and Korean women, as well as for white women, show the effects of more numerous children. Hence, for Japanese and white women this evidence suggests that distances of mobility upward are shorter and distances of mobility downward longer as the number of children ever born increases. For Chinese, Filipino and Korean women, these results are not quite as clear.

Table 5.09. Mean Relative Mobility for Oriental and White Women, 25-44 Years of Age by Number of Children Ever Born

Age, direction of mobility and number of children born	Japanese	Chinese	Filipino	Korean	White
25-34					
Up					
None	.396	.297	.233	.105	.298
One	.257	.344	.225	.395	.265
Two	.291	.454	.223	.547	.240
Three	.261	.245	.426	.114	.224
Four	.223	---	---	---	.210
Five or more	.170	.055	.096	---	.209
Down					
None	.382	.396	.402	.723	.379
One	.309	.479	.406	.792	.403
Two	.414	.555	.480	.638	.428
Three	.303	.398	.572	---	.450
Four	.464	.649	.461	.960	.467
Five or more	---	.669	.383	.835	.488
35-44					
Up					
None	.224	.297	.245	.091	.279
One	.198	---	.222	---	.238
Two	.276	.286	.079	.798	.244
Three	.187	.253	.408	---	.232
Four	.242	.318	.178	.055	.226
Five or more	.448	.128	.340	.317	.216
Down					
None	.459	.318	.454	.821	.398
One	.354	.551	.348	.914	.430
Two	.473	.395	.345	.561	.435
Three	.478	.713	.616	.485	.447
Four	.585	.450	.544	---	.465
Five or more	.400	.500	.485	---	.472

The presence of preschool children at home might normally be expected to retard occupational achievement and upward occupational mobility as the presence of children under six years of age does for white women (Table 5.10). At ages 25 to 34 and 35 to 44, mobile white women with no preschool children at home, move longer distances upward and they also move shorter distances downward than mothers. Upwardly mobile Japanese women manifest the same pattern as white women, but downwardly mobile Japanese women descend further if they have no preschool child at home than if they did have a preschool child at home. Mobile Chinese women move further upward and a shorter distance downward if they have a preschool child than if they do not, a pattern the exact opposite to that for white women. Mobile Filipino and Korean women at ages 25 to 34 portray the same pattern as for white women.

In comparison with white upwardly mobile women, Japanese and Chinese women with no preschool children move at least as far upward in the occupation structure as white women, but Filipino and Korean women fail to move upward as far as white women. Generally, mobile Oriental women with one preschool child move upward as well as comparable white women. Among the downwardly mobile women, the results are less certain as to whether Oriental women drop shorter distances than whites, although for Japanese women this appears to be the case.

ORIGIN AND DESTINATION OCCUPATIONS

Mobility between major occupation groups resulted in generally improved occupational standing for Oriental workers, although there are noticeable exceptions (Tables 5.11 - 5.13). Oriental movers went mainly away from blue-collar and farming toward white-collar occupations, in much the same pattern as white movers.

Origin and destination occupations for Japanese movers are similar to the pattern for white men and women, and shifts in occupational distributions of mobile workers are also similar. Japanese men who moved between 1965 and 1970 were concentrated in professional, managerial, clerical, crafts and operative occupations at their origin in 1965, and were even more heavily clustered in professional, managerial and craft occupations by 1970. Japanese men also increased in service occupations as they tended to shift away from all other occupations, including clerical. Mobile Japanese women in 1965 were primarily in professional, sales, clerical, operative and service occupations, a pattern closely resembling that for white women. A fourth of the Japanese mobile women were in clerical occupations in both 1965 and 1970, but mobility increased their numbers in professional and service occupations as well as in managerial positions.

Table 5.10. Mean Relative Mobility for Oriental and White Women 25 to 44 Years of Age by Presence of Own Children Under Six in Household

Age, direction and children	Japanese	Chinese	Filipino	Korean	White
25-34					
Up					
None	.339	.290	.236	.162	.263
One	.270	.298	.285	.570	.253
Down					
None	.396	.463	.293	.742	.409
One	.326	.424	.468	.774	.421
35-44					
Up					
None	.252	.255	.192	.362	.238
One	.208	.279	.244	.351	.230
Down					
None	.460	.555	.454	.753	.439
One	.434	.389	.521	.485	.465

Table 5.11. Distributions of Mobile Oriental and White Workers by Sex and Occupation in 1965

Sex and occupation	Japanese	Chinese	Filipino	Korean	White
Male	100.0	100.0	100.0	100.0	100.0
Professional	11.9	10.3	13.6	17.1	8.0
Managerial	12.2	20.1	6.5	14.6	11.6
Sales	9.8	8.8	6.0	22.0	9.4
Clerical	11.2	11.3	7.8	14.6	8.4
Crafts	16.0	6.1	8.7	2.4	16.8
Operatives	10.6	16.7	17.1	17.1	16.2
Transp. eq.	3.7	1.5	5.1	4.9	6.8
Laborer	9.8	7.8	7.3	---	10.3
Farmer	5.0	1.0	4.1	2.4	3.4
Farm laborer	5.0	.5	11.1	---	2.5
Service	4.8	15.9	12.7	4.9	6.6
Female	100.0	100.0	100.0	100.0	100.0
Professional	11.8	19.2	42.0	20.0	10.3
Managerial	8.7	10.9	3.4	8.9	8.6
Sales	14.5	9.6	2.3	4.4	14.3
Clerical	25.7	18.6	18.2	24.4	24.6
Crafts	3.2	3.9	2.3	8.9	3.3
Operatives	11.3	13.5	10.8	11.1	12.9
Transp. eq.	.3	---	.5	2.2	.6
Laborer	2.6	4.5	3.4	---	2.6
Farmer	2.9	.6	1.7	---	1.4
Farm laborer	1.7	.6	4.0	---	.9
Service	14.7	17.3	9.1	20.0	18.6
Priv. household	2.6	1.3	2.3	---	1.8

Table 5.12. Distributions of Mobile Oriental and White Workers by Sex and Occupation in 1970

Sex and occupation in 1970	Japanese	Chinese	Filipino	Korean	White
Male	100.0	100.0	100.0	100.0	100.0
Professional	13.9	12.8	10.3	26.8	9.5
Managerial	20.8	18.6	5.7	29.3	16.8
Sales	9.1	7.6	3.8	9.8	8.5
Clerical	8.9	11.8	14.4	2.4	8.8
Crafts	16.3	10.8	16.8	12.2	20.4
Operatives	8.3	10.0	11.9	7.3	12.8
Transp. equip.	2.5	2.7	3.8	2.4	6.4
Laborer	7.8	3.7	10.3	---	6.6
Farmer	2.1	.2	---	---	1.5
Farm laborer	3.2	---	4.6	---	1.6
Service	7.1	21.8	18.4	9.8	7.1
Female	100.0	100.0	100.0	100.0	100.0
Professional	13.9	14.1	8.0	20.0	12.3
Managerial	12.7	9.0	2.3	4.4	9.9
Sales	8.7	6.4	5.1	4.4	11.0
Clerical	25.7	35.3	43.7	17.8	28.5
Crafts	3.4	2.6	2.3	2.2	4.1
Operatives	11.0	14.7	11.3	24.4	12.5
Transp. equip.	.3	.6	---	---	.8
Laborer	2.6	2.6	2.3	---	2.0
Farmer	.9	---	---	---	.3
Farm laborer	2.3	.6	.6	---	1.4
Service	15.9	10.9	21.6	22.2	14.8
Private house.	2.6	3.2	2.8	4.4	2.4

Table 5.13. Differences Between Origin and Destination Occupations for Mobile Workers, by Sex, 1965-70

Sex and occupation	Japanese	Chinese	Filipino	Korean	White
Male					
Professional	2.0	2.5	-3.3	9.7	1.5
Managerial	8.6	-1.5	-.8	14.7	5.2
Sales	-.7	-1.2	-2.2	-12.2	-.9
Clerical	-2.3	.5	6.6	-12.2	.4
Crafts	.3	4.7	8.1	9.8	3.6
Operatives	-2.3	-6.7	-5.2	-9.8	-3.4
Transp. eq.	-1.2	1.2	-1.3	-2.5	-.4
Laborer	-2.0	-4.1	3.0	---	-3.7
Farmer	-2.9	-.8	-4.1	-2.4	-1.9
Farm laborer	-1.8	-.5	-6.5	---	-.9
Service	2.3	5.9	5.7	4.9	.5
Dissimilarity:	.132	.148	.234	.391	.112
Female					
Professional	2.1	-5.1	-34.0	---	2.0
Managerial	4.0	-1.9	-1.1	-4.5	1.3
Sales	-5.8	-3.2	2.8	---	-3.3
Clerical	---	16.7	25.5	-6.6	3.9
Crafts	.2	-1.3	---	-6.7	.8
Operatives	-.3	1.2	.5	13.3	-.4
Transp. eq.	---	.6	-.5	-2.2	.2
Laborer	---	-1.9	-1.1	---	-.6
Farmer	-2.0	-.6	-1.7	---	-1.1
Farm laborer	.6	---	-3.4	---	.5
Service	1.2	-6.4	12.5	2.2	-3.8
Priv. household	---	1.9	.5	4.4	.6
Dissimilarity:	.081	.204	.418	.200	.093

The origin and destination occupational distributions of mobile Korean men show a pattern of change similar to that for Japanese and white men. Their shifts were more pronounced, however, particularly toward professional and managerial occupations and away from sales and clerical jobs. The moves of Korean women resulted in gains in operative and private household service workers.

Occupational distributions of Chinese at their origins and destinations were similar to the Japanese, but their shifts through mobility differ. Chinese men succeeded in moving toward professional, craft and service occupations; at the same time they were decreasing in managerial and sales as well as in the blue-collar and farm occupations. Mobile Chinese women evidenced a notable shift toward clerical jobs, but they lost ground in the upper white-collar occupations and in service jobs.

Filipino men and women both lost ground in professional and managerial jobs, with the men moving primarily toward clerical and craft occupations and women toward clerical and service jobs.

The magnitude of changes in occupational distributions can be summed up by the index of dissimilarity, which portrays the degree of occupational redistribution resulting from mobility (Table 5.13). For Japanese, Chinese and white men, the net result of mobility involved a change of slightly more than 10%, but the shift for Koreans was much greater. For Korean men, the index of dissimilarity was .391. While the mobility of Oriental men appears to be generally upward, for Filipino men the occupational distribution shifted by 23%, with mixed results. Filipino men increased in clerical and crafts, but lost in upper white-collar, farm and operative jobs.

Observed and Expected Destinations

Differences in occupational destinations of Oriental and white movers can be attributed in part to differences in occupational mobility. The inferior occupational achievements of nonwhite men (i.e., mostly blacks) in the United States has been explained on the basis of their disadvantaged patterns of mobility rather than to impoverished origins (Duncan, 1968; Hauser and Featherman, 1974a and 1974b). Oriental workers, as a whole, however, lack the low occupational level of blacks. Moreover, because of their generally high levels of occupational achievement, mobile Orientals might suffer if constrained by the mobility pattern of whites. Since the disadvantaged mobility thesis accords greater importance to mobility than to origin occupations, it is instructive to determine what would happen to the destination distributions of Orientals if they had (a) the same mobility opportunities as whites, or, alternatively, (b) the same occupational origins as whites.

In order to examine effects of both mobility and occupational origin, two sets of expected destination distributions were calculated separately for men and for women. First, mobility matrices for whites were applied to the 1965 occupation distributions for each of the Oriental groups of mobile workers. The resultant expected destinations of Orientals are based on the assumption that Oriental workers move in the same ways that white workers move. Differences between observed white and these expected Oriental destinations are the result solely of differences in occupational distributions in 1965, since Orientals have the same mobility patterns as whites. Secondly, the origin distribution of whites in 1965 was multiplied by the actual mobility matrix for each of the Orientals. Differences between observed white and these expected Oriental destinations are the sole result of actual mobility inasmuch as both are provided with the same occupational origins.

Results indicate that mobility has a greater influence on the destinations of Oriental movers than their occupation in 1965 (Table 5.14). The index of dissimilarity is applied here to measure differences between (a) the observed occupational destinations of white and Oriental movers and (b) the observed white destinations under the assumptions of equal mobility and equal origins. In the case of Japanese men, for example, there is relativ[illegible]tle difference between the actual destinations of Japanese and white m[illegible] as indicated by the D-index of .14 in column (1). As usual, this index [illegible].ns that 14% of the Japanese men would need to move to different occupation groups in order to have the same pattern of occupational destinations as white men. In column (2), under the assumption of equal mobility, the index value is reduced to .09, suggesting that when mobility is equated differences in origin still account for much of the total dissimilarity in destinations of whites and Japanese. However, in column (3) the index has dropped to .03, a rather clear indication that mobility is more effective in reducing differences in destinations than 1965 occupations. With the exception of Japanese women, whose destinations differ very little from those for white women, all other Oriental men and women display the kind of pattern illustrated by mobile Japanese men.

SUMMARY

Oriental workers in the United States had generally achieved a comparatively high occupational level by 1970 and part of this achievement can be attributed to their ascent from 1965 to 1970. In comparison with white movers, both Oriental men and women have done well in moving to higher level occupations. Such generalizations as this, however, require substantial qualification, as the preceding discussion has demonstrated. The movement of Japanese and Chinese between major occupations, for example, closely resembles the mobility pattern of whites, but Korean men tend to have greater and Filipino men less success than white men.

The complexities of occupational mobility are unfolded in a variety of ways. The dynamics of the occupational system itself involve frequencies of mobility, movement attributable to changes in the occupational structure, variations in the degree of efficiency and differences in the direction and distance of movement. Korean and Filipino men were more mobile between 1965 and 1970 than Japanese and Chinese men, but white men moved more often than any of the Oriental men. Filipino women, however, were not only more mobile than white and other Oriental women, but also more mobile than Oriental men. While generally, a third to a half of all workers were mobile, younger workers were more mobile than older ones. Men typically change jobs more often than women, but Japanese and Filipino women depart from this pattern.

Comparisons of the efficiency of occupational mobility reveal numerous variations among Oriental workers and also differences between occupations. Mobility is considered inefficient if the total movement to and from an occupation is substantially greater than the net change from movement. Japanese men, moving to and from craft occupations, for example, needed 91 moves to accomplish a net gain of one Japanese man in craft jobs, but for managerial jobs they required only 4 moves to gain one. Despite such contrasts there seems to be no distinctive pattern in the efficiency of movement which would support the argument that a particular color-ethnic-sex group is subject to discrimination.

Aside from questions of efficiency, there are strong indications that reductions in the number of workers in an occupation are not equally distributed. Mobility forced by changes in the occupational structure had its greatest impact among mobile Filipino women, 42% of whom had to change occupation between 1965 and 1970. With the exception of Japanese movers, especially Japanese women, all Orientals were recipients of a disproportionate share of forced occupational mobility. If their high average level of educational attainment is taken as an indicator of qualifications, there is no justification for the high incidence of forced mobility among Orientals.

Most occupationally mobile men, but not women, moved upward in the occupational structure between 1965 and 1970. Nearly two-thirds of all mobile Korean men and half of all mobile Korean women moved upward, the highest rates of advance among all Oriental groups. Koreans, in fact, were more upwardly mobile than Spanish origin, American Indian, black and white workers. Given their high levels of occupational achievement, their success in moving even further upward is a remarkable accomplishment. Less successful were the Japanese, Chinese and Filipinos who were less upwardly mobile than white men and women. Only a third of mobile Filipino women moved upward, and this fact along with their high rate of forced movement contrasts with their high average levels of occupational achievement. Oriental-white differences in upward mobility were generally less than between men and women and among the Orientals. Sex differences in

upward mobility were comparatively great and clearly favor men over women.

Among workers ascending the occupational ladder, Japanese, Chinese and Koreans moved further toward the top than whites, whereas Filipino men and women failed to ascend as far upward as white men and women. Most upwardly mobile workers moved at least a fourth of the distance toward the top of the structure, but men invariably averaged longer distances upward than women.

Downwardly mobile workers average greater distances than upwardly mobile workers, descending a third or more of the way toward the bottom of the occupational structure. Filipino and Chinese men dropped the longest and Korean and white men the shortest distances. Women typically descend longer distances than men, and Korean women lost the most by dropping nearly two-thirds of the distance downward.

The importance of higher levels of educational attainment is accentuated by contributing to higher degrees of upward mobility and deterring downward mobility. Young Japanese and Chinese men and women, as well as Filipinos, Koreans and whites with college educations ascend longer distances upward than those with only a high school education. Moreover, for at least Japanese, Chinese and white men, higher educational attainment reduces the distances downward for those dropping in occupational status. The advantages of a college over a high school education are less apparent for women than for men. Some women, notably white, move further upward than men among college graduates, whereas among high school graduates men go further toward the top. Women also tend to descend further than men among both high school and college graduates. Intergroup comparisons do not show a consistent advantage or disadvantage between Orientals and whites as far as the influences of educational attainment are concerned.

The net influence of nativity and citizenship on distances and direction of mobility neither favors nor disfavors Orientals. Native American men and women of Japanese and Chinese heritage move longer distances than native whites. Naturalized upwardly mobile Chinese and Korean men also ascend longer distances than white men. Among naturalized women, only Japanese ascend further than white women. All alien Orientals ascend further that white aliens. Naturalized and alien Orientals descent further than natives of Oriental heritage.

Childbearing and childrearing normally tend to restrict employment, occupational achievement and mobility for women in the United States. At least this is the case for white women. For Oriental women, however, there are indications that cumulative fertility (number of children ever born) is related directly to the distances of occupational mobility: young Chinese mothers of one or two children, for example, move further upward and also further downward than childless Chinese women. Whereas

the presence of preschool children at home reduces upward and increases downward distances for white and Japanese women, this is not so for Chinese women. Not yet clearly identified, there appears to be a cultural factor among Chinese women, which reduces the expected "handicap" of childbearing and childrearing when it comes to upward occupational mobility.

Occupationally mobile Orientals moved chiefly from farming and blue-collar occupations toward white-collar occupations. Korean men showed the largest gains in professional, managerial and craft occupations, and Filipino men lost through their movements in professional and managerial jobs, although they gained in crafts.

The typically high levels of occupational destinations for Oriental mobile workers are more a consequence of their favorable mobility patterns than of their high level of occupation in 1965. Although destination differences are relatively slight, especially between white and Japanese movers, it appears that most Oriental groups of movers would have to accept lower level occupational destinations if they were induced to match the mobility of white men and women.

Overall,there is no consistent indication of disrimination against Orientals when it comes to questions of occupational mobility. The mobility of Japanese, Chinese, and Korean men and women compares quite favorably with occupational movements of white men and women. Japanese and Chinese moved further toward the top of the occupational structure, although they moved less frequently than whites. Filipino men and women may be the least advantaged of the Orientals, as illustrated by their comparatively short-distance moves upward and longer-distance moves downward.

Table 5.14. Actual and Expected Destination Dissimilarities Between White and Oriental Movers, by Sex

Sex	Dissimilarities (1) Observed	(2) Expected Equal Mobility	(3) Equal Origin
Male			
Japanese	.14	.09	.03
Chinese	.34	.26	.09
Filipino	.34	.22	.12
Korean	.43	.33	.13
Female			
Japanese	.06	.04	.06
Chinese	.17	.15	.08
Filipino	.21	.22	.06
Korean	.28	.22	.12

CHAPTER 6

DIFFERENTIALS IN EARNINGS

In the final phase of this study, the chief question is whether differences in earnings are a function of color and sex characteristics. Variations in earnings from employment can be partly explained by differences in such factors as the amount of time worked, occupation, class of worker and the amount of education and training required. In the absence of discrimination, workers should earn about the same amount from their employment when other determinants of earnings are controlled. On the basis of evidence presented in earlier chapters, differences in earnings between Orientals and whites are expected to be rather minor, whereas differences in the earnings of men and women should be comparatively large.

Earnings from wages and salaries in 1969 serve as a measure of "income" in the following analysis. This means that income from other sources--public assistance, social security or railroad retirement, dividends, interest, property rentals, and receipts from roomers or boarders--is excluded. The use of earnings rather than a more comprehensive definition of income is appropriate within the context of this study, aimed as it is toward questions of achievement in the labor market. Earnings from wages and salaries are a direct consequence of workers' positions in the labor market--occupancy of a particular job in a particular industry in a local community and so forth.

FAMILY AND PERSONAL INCOMES

Earnings from wages and salaries accounted for the major proportion of total income received by Orientals as well as whites in 1969 (Table 6.01). Among men, about 60% to 70% of their total income came from wages and salaries. The corresponding figures for women ranged from 73% to 83%. Thus, earnings constitute roughly about the same proportions of total incomes among the study populations. Except for Table 6.02, which presents family and personal income data from all sources and disregards employment status of workers in 1970, subsequent analyses focus on earnings and include only persons who reported earnings for 1969.

Table 6.01. Sources of Income in 1969 Among Orientals and Whites, by Sex

Sex and color	Total Income	Wages and salary	Non-farm	Own farm	Soc. Sec. or retire.	Public asst./welf.	All other sources
Male							
Japanese	100.0[a]	59.2	10.4	2.2	1.1	0.2	26.9
Chinese	100.0	61.7	11.6	0.3	1.2	0.3	24.8
Filipino	100.0	76.0	4.2	0.8	2.6	0.9	15.5
Korean	100.0	71.6	7.5	0.2	0.2	0.7	19.6
White	100.0	66.1	7.8	3.4	1.6	0.4	20.6
Female							
Japanese	100.0	76.6	4.3	0.3	2.1	0.7	16.0
Chinese	100.0	73.1	5.5	0.2	2.3	0.9	18.1
Filipino	100.0	87.2	2.0	0.2	1.3	0.8	8.5
Korean	100.0	82.5	3.0	0.5	2.0	0.5	11.6
White	100.0	78.3	3.4	0.5	3.2	0.8	13.8

Income Differences Among Orientals and Whites

Japanese family incomes are among the highest in the country (Table 6.02). With a median family income of $12,515 in 1969, Japanese families surpass all other Oriental groups and whites. The median family income of Chinese of $10,610, provides Chinese families with a small income advantage over whites whose family income approaches $10,000 a year. Filipino families, on the other hand, have the lowest median income of these Oriental groups in the U.S., although only about $600 lower than whites. Family income for Koreans, which is not available, is believed close to the income levels of Chinese or white families.

In terms of personal income, Japanese and white men lead all groups with average incomes of $7,574 and $7,106, respectively. Korean men remain close, followed by Chinese and finally by Filipinos. Among women, Filipinos average the highest income with Japanese closely behind. Personal income levels for the remaining women are about the same, averaging some $2,600 annually, substantially lower than men regardless of color.

AGE AND SEX DIFFERENCES IN EARNINGS

Earnings and age are not related linearly, which means that earnings tend to be higher at intermediate ages than at either younger or older ages. Median earnings of employed men tend to be highest between the ages 35 and 49, when many have already completed their educational and occupational training and are engaged in full time employment (Table 6.03). At these peak earnings ages, Japanese men dominate all groups in median earnings. Following closely are white, Korean, and Chinese men; Filipino men have the lowest median earnings at most ages.

Among working women, median earnings for all groups tend to peak at two age levels, 25-29 and 50-54. On the other hand, earnings are noticeably low for women under 20 and over 64. Korean women tend to have lower median earnings than any other group of working women. This is particularly true for those under 40 years of age, although the differences for the most part disappear and become inconsistent at older ages. The remaining women, including whites, do not differ in median earnings to any great extent at specific ages.

Quite predictably, employed women average substantially lower wages and salaries than working men regardless of age or race. Sex differences

Table 6.02. Median Income of Orientals 16 Years Old and Over and White 18 Years Old and Over in 1969

Race or color	Median Family Income	Median Personal Income	
		Male	Female
Japanese	$12,515	$7,574	$3,236
Chinese	10,610	5,223	2,686
Filipino	9,318	5,019	3,513
Korean	---	6,435	2,741
White	9,957	7,106	2,531

PC(2)-16, Tables 4, 9, 19, 24, 34, 249;
PC(1)-D1, Tables 249, 256

Table 6.03. Median Earnings in 1969 of Employed Persons, by Sex and Age

Sex and age	Japanese	Chinese	Filipino	Korean	White
Male					
Under 20	$1843	$1388	$1650	$1750	$2080
20-24	4387	3727	4128	5333	5284
25-29	7869	7263	6795	5750	7979
30-34	9916	8708	7056	8617	9146
35-39	10572	9250	7895	9033	9691
40-44	10233	8923	8145	10909	9760
45-49	10161	8184	7112	9750	9549
50-54	9388	7872	6714	9750	8945
55-59	8735	6957	6421	6375	8356
60-64	7812	5326	5720	8500	7689
65-69	4444	3625	3847	5750	5092
Female					
Under 20	1800	1375	1333	833	1648
20-24	4077	3516	3289	2500	3660
25-29	5720	5210	4966	3526	4208
30-34	5000	4448	4622	3638	3662
35-39	4297	4202	4478	3285	3675
40-44	4572	4164	4260	5388	3928
45-49	4599	3866	3888	4500	4174
50-54	4777	3937	4326	3875	4218
55-59	4187	3381	4000	4500	4207
60-64	3888	2750	3071	2500	4098
65-69	1528	1595	2750	1000	2330

in median earnings are particularly great between the ages 35-49, where women generally receive less than half the wages and salaries of their male counterparts.

Differences in earnings among working groups are likewise evident in the percentage distributions of workers by earnings (Table 6.04). Among men, Japanese are disproportionately represented in the upper earnings brackets. About 42% of the Japanese working men have earnings of $10,000 or more, whereas the corresponding figures for Korean, white, and Chinese men are in the neighborhood of 35%. As expected, Filipino men have the lowest proportion of workers (17%) with earnings of $10,000 or more.

In contrast to the men, considerably fewer women have earnings reaching $10,000 or more. The majority of women in any particular working group fall below the $5,000 level. Oriental and white women are similarly distributed by earnings, with slight differences favoring Orientals in the upper earning categories.

In general, despite the observed variations in earning patterns among Oriental and white workers, there is essentially little difference in their overall earnings distributions. Table 6.05 presents indices of dissimilarity in earnings for each of the four Oriental groups in relation to whites, classified by sex. The D-values for both sexes are small, suggesting that only slight modifications are needed to produce an even distribution in levels of earnings. However, one relatively extreme exception appears between Filipino and white males where a shift of 22% would be necessary to achieve equal distributions of earnings. As observed earlier, this reflects the greater concentration of Filipino men in lower categories of earnings relative to white men. Accordingly, the shift should be towards higher earnings for Filipinos to reach equality in earnings with white men.

EQUAL QUALIFICATIONS AND EARNINGS

Differences in Earnings by Education

Average earnings are higher at higher levels of education, as has been found repeatedly in a number of studies. In addition to the rather sharp contrast between men and women, there are two points to be emphasized in this discussion. First is the question of whether differences in earnings tend to disappear when education is controlled, and second the question of differences in increments in earnings accompanying increases in educational attainment.

Table 6.04. Percentage Distribution of Earnings in 1969 of Employed Persons, by Sex

Earnings	Japanese	Chinese	Filipino	Korean	White
Male	100.0	100.0	100.0	100.0	100.0
Under $1,000	3.3	4.4	5.9	3.9	3.6
$1,000-1,999	2.6	4.4	4.8	4.5	3.3
$2,000-2,999	2.5	5.4	5.3	5.1	3.1
$3,000-3,999	3.3	7.0	7.0	4.6	4.3
$4,000-4,999	4.4	8.5	10.2	5.5	5.3
$5,000-5,999	5.6	8.2	12.2	7.9	7.5
$6,000-6,999	8.1	7.3	11.8	7.6	8.8
$7,000-7,999	9.8	7.6	11.0	6.6	10.3
$8,000-8,999	10.0	7.1	9.1	8.5	10.3
$9,000-9,999	8.3	5.7	5.7	9.1	8.2
$10,000-14,999	28.9	21.4	12.6	23.2	23.2
$15,000-19,999	7.9	7.8	2.4	7.6	6.4
$20,000-24,999	2.5	2.6	.7	2.1	2.4
$25,000 and over	2.9	2.5	1.4	3.6	3.3
Female	100.0	100.0	100.0	100.0	100.0
Under $1,000	12.7	16.9	15.4	19.3	16.3
$1,000-1,999	7.9	10.3	8.6	12.8	10.8
$2,000-2,999	9.3	10.8	9.5	9.4	11.1
$3,000-3,999	13.0	12.8	13.8	12.5	14.2
$4,000-4,999	12.6	12.6	13.7	9.9	13.6
$5,000-5,999	12.0	9.6	9.9	9.4	11.3
$6,000-6,999	10.7	7.7	9.1	7.3	8.3
$7,000-7,999	8.0	5.9	6.0	7.6	5.5
$8,000-8,999	5.1	4.9	5.2	3.7	3.2
$9,000-9,999	3.0	2.5	3.6	2.4	1.9
$10,000-14,999	4.8	4.8	4.0	3.9	3.1
$15,000-19,999	.6	.8	.7	1.0	.4
$20,000-24,999	.3	.3	.3	.2	.1
$25,000 and over	.2	.2	.3	.3	.2

Table 6.05. Dissimilarities in Earnings Between Orientals and Whites, by Sex

Sex	Japanese	Chinese	Filipino	Korean
Male	.07	.12	.22	.07
Female	.11	.06	.06	.10

The answer to the first question is mainly negative. The earnings of Japanese and white men are higher than for others at all educational levels (Table 6.06). In comparison with the earnings of white men. Filipino men are worse off at all educational levels. Moreover, their relative disadvantage worsens for those who have reached the college level, where Filipino college graduates have earnings only 60% as high as similar whites. The earnings levels of Japanese and Chinese men tend to converge with those of whites at the upper educational levels. However, this convergence occurs differently for Japanese and Chinese men. At the lower educational levels, Japanese men average higher but Chinese men lesser earnings than whites. At the college level, both Japanese and Chinese men average slightly lower earnings than whites, with the movement toward convergence representing contrasting patterns. Despite their high levels of occupational achievement, Korean men average lower earnings than whites; at the college level, their earnings are only about two-thirds as high as for whites.

Japanese women also average higher earnings than white women, but the convergence of earnings levels does not appear among women. At most educational levels, Japanese women average about 10% higher earnings than white women. The earnings of Chinese women are higher than for white women only for high school graduates and those with some college. Filipino women with some college also earn slightly more than white women, but as college graduates they earn less than whites. The earnings of Korean women are quite consistently lower than for whites at all educational levels. In general, differences in earnings between Orientals and whites are relatively small, but they do not change much when the influence of education on earnings is controlled.

As for the second question, there are both absolute and relative differences in earnings increments resulting from higher educational attainment (Table 6.07). Japanese men with a college education, for example, average $4,187 more in earnings than Japanese men with eight years of elementary education and $3,087 more than those with a high school education. While such increments attributable to higher educational attainment should serve to encourage Japanese to attain higher levels of education, the increments for Chinese and white men were even higher. Chinese men who were college graduates averaged $5,408 more in earnings than their compatriots with only 8 years of schooling. This increment from higher education is nearly double the average earnings of Chinese men with an elementary education. The earnings advantage of college over a high school education was largest for Filipino men and smallest for Korean men.

Table 6.06. Median Earnings in 1969 by Sex and Education

Sex and education	Japanese	Chinese	Filipino	Korean	White
Male					
None	$6428	$4810	$4712	$---	$5050
Elem., 1-7 years	6866	4632	5490	5750	6022
Elem., 8	7575	5567	6041	5900	7001
H.S., 1-3 years	7901	5863	6211	5500	7706
H.S., 4	8675	7441	6632	7687	8332
College, 1-3	9222	8326	6646	8400	9302
College, 4	11762	10975	7171	8111	12143
College, 5 or more	12601	12641	8974	9956	13571
Female					
None	3055	2669	2333	1625	2484
Elem., 1-7 years	3284	2781	3111	2300	2986
Elem., 8	3478	2725	3616	3250	3154
H.S., 1-3 years	3503	3150	3349	2600	3296
H.S., 4	4564	4400	3676	3660	3854
College, 1-3	5295	4696	4420	4111	4267
College, 4	6666	5705	4973	5076	5943
College, 5 or more	7833	7486	6767	7692	8101

Table 6.07. Increments in Earnings from Higher Education, by Sex

Sex and gains from education	Japanese	Chinese	Filipino	Korean	White
Male					
College 4 over:					
Elem. 8					
Absolute	$4187	$5408	$1130	$2211	$5142
Relative	55.3%	97.1%	18.7%	37.5%	73.4%
High School 4					
Absolute	$3087	$3534	$4073	$ 424	$3811
Relative	35.6%	47.5%	61.4%	5.5%	45.7%
Male					
College 4 over:					
Elem. 8					
Absolute	$3179	$2980	$1357	$1826	$2789
Relative	91.4%	109.4%	37.5%	56.2%	88.4%
High School 4					
Absolute	$2102	$1305	$1297	$1416	$2089
Relative	46.0%	29.7%	35.3%	38.7%	54.2%

The absolute increments in earnings accruing from higher education were generally less for women than for men, but the relative increases for women were often higher than for men. This is illustrated by the increments of college graduates over those with an elementary education. Japanese women college graduates,for example, averaged $3,179 more in earnings than those with only an elementary level of education. This increment for Japanese women is only about three-fourths as large as the corresponding dollar increment for Japanese men. However, the relative increase for Japanese women is almost double, whereas for Japanese men the increment is about half again as large as the earnings level for those with an elementary education. The advantages of a college education over either an elementary level or high school are relatively high for white women, although not greatly different than for Japanese women. Filipino and Korean women appear to suffer most in comparison with white women.

Finally, what is most devastating about the fact that women earn less than men is that Oriental and white women average only about half the earnings levels of men at all educational levels. Thus, despite the relative increments resulting from college over lower levels of educational attainment, college women average barely more than half the earnings levels of college men. White college women, in fact, fare less well than Oriental women. Japanese college women averaged $6,666, or about 57% as high as Japanese college men, while white college women average $5,943, not quite half as much as white college men's $12,143.

Vocational Training

Partly as a consequence of their overall high educational attainment, the majority of Orientals have not had vocational training, and perhaps have less need for training than other minorities. But for those with training, Orientals in nursing and other health fields generally obtain the highest median earnings (Table 6.08). This is most evident among men where, at ages 50-59, all three Oriental groups have earnings averaging from about $12,000 to $20,000 annually--unsurpassed by those from other fields of training in this particular age group. Earnings of Orientals in nursing and other health fields, which seem uncommonly high in several instances, raise the possibility of errors in classification. It may be that Oriental men with degrees in medicine (M.D.'s) reported such as vocational training under the health fields.

Orientals with training as engineering technicians and Japanese men with training in business average high earnings. Among white men, training in engineering, business, and nursing leads to higher median earnings than training in such fields as agriculture or home economics, and trades and crafts.

Table 6.08. Median Earnings in 1969 of Males, by age and Vocational Training*

Age and training	Japanese	Chinese	Filipino	White
Under 30				
With vocational training	$6705	$5722	$5458	$6923
Business, office work	6642	6166	5166	7095
Nursing, other health	4000	7500	6500	6535
Trades and crafts	7272	6333	5916	7130
Engineering technician	6500	7000	6750	7560
Agric., or home econ.	---	---	---	5839
Other field	---	---	---	6721
Not reported	4000	3750	3500	5555
30-39				
With vocational training	10641	9625	7800	9753
Business, office work	11250	10500	6100	10016
Nursing, other health	9250	8666	9333	10228
Trades and crafts	10335	9187	8600	9714
Engineering technician	11824	10859	9000	11525
Agric., or home econ.	11785	---	---	8353
Other field	8000	10500	10833	9592
Not reported	8000	8100	6750	8370
40-49				
With vocational training	9905	9975	8266	10100
Business, office work	10446	8000	7500	10898
Nursing, other health	9500	14375	13750	11538
Trades and crafts	9679	10312	8777	9977
Engineering technician	12592	13235	9250	12454
Agric., or home econ.	9250	---	---	7898
Other field	8000	6000	---	10038
Not reported	8500	7750	7125	8605
50-59				
With vocational training	9326	8625	7433	9323
Business, office work	10000	7500	9166	10521
Nursing, other health	12500	22500	20000	10821
Trades and crafts	9450	8625	7687	9198
Engineering technician	11500	12187	9500	11809
Agric., or home econ.	8166	---	---	6980
Other field	---	---	---	9304
Not reported	7750	6333	6000	8109
60-69				
With vocational training	7722	6750	---	7951
Business, office work	7900	6250	10000	8493

Table 6.08. Continued

Nursing, other health	20000	12500	6000	10685
Trades and crafts	6500	8166	5700	7878
Engineering technician	---	---	---	10218
Agric., or home econ.	---	---	---	5935
Other field	---	---	---	7919
Not reported	6000	2500	5500	6980

*Because of insuffieicnt frequencies, Korean men were excluded from this table.

Among men under 30 years of age, whites receive somewhat higher earnings than any of the Oriental workers among the various fields of vocational training. However, for those over 30, average earnings of Japanese and Chinese in many cases equal or surpass whites' earnings within specific vocational training areas. Filipino men tend to average the lowest earnings in all fields but health.

Earnings of Oriental and white women also vary by types of vocational training. In general, Oriental and white women who have received training in nursing and business tend to enjoy comparatively high average earnings (Table 6.09). Also, where adequate frequency figures are available from the sample data, training in engineering has high financial rewards. This is particularly true among white women who as engineering technicians reap the highest average earnings for all ages and vocational training categories among women.

Furthermore, differences in earnings between working women by vocational training show that Orientals enjoy a relative advantage in median earnings over their white counterparts in several fields of training. This is especially shown among working women in the fields of nursing and business.

Disability

The presence of a disability exerts an expectedly negative influence on earnings. Workers with work-limiting disabilities generally have lower median earnings than those with no disability (Table 6.10). For example, among men under 35 years old, non-disabled Oriental and white workers earn about $1,500 to $3,000 more than workers reporting a disability.

Control for the presence of a disability does not alter the basic pattern of earnings. Regardless of the presence or absence of disability, Filipinos generally have the lowest levels of earnings among working men. On the other hand, Japanese and white men rank at the top of the earning ladder, while Chinese and Koreans tend to occupy the intermediate rungs.

Among women reporting no disability, Japanese consistently show higher average earnings, but among women with work-limiting disability, Chinese lead all groups in median earnings. Small and inconsistent differences in earnings exist among other groups in both categories of disability.

Citizenship

Citizenship status manifests differential patterns of influence on earnings among specific Oriental and white groups. For Japanese and

Table 6.09. Median Earnings in 1969 of Females, 14-59, by Age and Vocational Training*

Age and training	Japanese	Chinese	Filipino	White
Under 30				
With vocational training	$4929	$4461	$4080	$3775
Business, office work	5236	4500	4722	4125
Nursing, other health	6000	5000	4500	4143
Trades and crafts	4166	4500	3500	3069
Engineering technician	---	---	5500	4858
Agric., or home econ.	---	---	---	3302
Other field	2750	5666	4000	3827
Not reported	4000	2500	2562	2915
30-39				
With vocational training	4977	4777	5000	4016
Business, office work	5972	4375	5214	4392
Nursing, other health	5400	7300	6269	4143
Trades and crafts	3500	1500	---	3440
Engineering technician	---	---	---	6333
Agric., or home econ.	---	---	---	3068
Other field	5500	---	---	4220
Not reported	3285	3833	4625	3454
40-49				
With vocational training	5100	5785	4576	4483
Business, office work	6000	6857	5200	4834
Nursing, other health	6083	5500	6125	4744
Trades and crafts	4321	4000	3937	3734
Engineering technician	---	---	---	6260
Agric., or home econ.	3800	---	---	3750
Other field	3642	---	---	4792
Not reported	4222	3500	3125	3681
50-59				
With vocational training	5500	5687	3416	4862
Business, office work	6071	6750	---	5275
Nursing, other health	7250	---	---	5291
Trades and crafts	3625	---	3250	3777
Engineering technician	---	---	---	7117
Agric., or home econ.	---	---	---	3905
Other field	---	---	---	5216
Not reported	4250	3166	1750	3891

*Because of insufficient frequencies, Korean women were excluded from this table.

Table 6.10. Median Earnings in 1969 by Age, Sex and Disability Status

Age, sex and disability	Japanese	Chinese	Filipino	Korean	White
Male					
Under 35					
No disability	$7702	$7023	$6198	$7861	$7391
Work-limiting disability	6166	4800	4500	4833	5660
35-49					
No disability	10426	8823	8133	9857	9820
Work-limiting disability	8300	6714	7000	10000	7863
50-69					
No disability	8625	6462	5959	9000	8423
Work-limiting disability	8300	6062	4900	---	6843
Female					
Under 35					
No disability	4830	4194	3957	3250	3556
Work-limiting disability	2250	3833	3666	2000	2667
35-49					
No disability	4486	4036	4164	3843	3998
Work-limiting disability	3250	3625	3875	6500	3024
50-69					
No disability	4227	3415	3710	4000	4178
Work-limiting disability	3437	3750	1000	3000	2927

Chinese of both sexes, including Filipino men and Korean women, persons of native birth tend to average higher earnings than those of naturalized or alien status (Table 6.11). However, for the remaining subgroups, earnings characteristically higher for naturalized citizens than for alien or native born persons.

Intergroup differences in earnings are not modified to any great extent by controlling for citizenship status. Among men and within specific age and citizenship categories, Filipinos generally reveal lower earnings than other groups. Among women, however, Filipinos exhibit superior levels of earnings relative to other groups in both naturalized and alien statuses, but rank noticeably low in the native born category. These differences might indicate superior levels of skills and education among immigrant Filipino women, not only in relation to their native born sisters but other Oriental and white immigrant women as well.

EQUAL WORK CONDITIONS AND EARNINGS

Weeks Worked

Comparisons between specific Oriental groups and whites by the number of weeks worked in 1969 reveal variations in patterns in their levels of earnings. In contrast to whites, Japanese have slightly higher earnings in all categories of weeks worked among men under 30, but irregularities appear at older ages. In the ages 30-49, Japanese tend to be particularly low in earnings when working 13 weeks or less, but show superior earnings where engaged in full year employment (50-52 weeks). Similar inconsistent differences exist between Chinese men and white men and between Korean men and white men. On the other hand, more regular patterns of difference are exhibited between the earnings of Filipino and white men. In most of the ages and work-duration categories, Filipinos receive noticeably lower wages and salaries than whites.

Oriental women show higher earnings than white women in virtually every age and work-duration category. In particular, Filipino women rank highly in earnings at ages 30-39, surpassing every other group in all categories of weeks worked (Table 6.12). Furthermore, although data are not presented here, intergroup comparisons in earnings by hours worked have shown considerable irregularities in patterns of difference along specific age and sex groups.

Table 6.11. Median Earnings in 1969 of Persons, by Age, Sex and Citizenship

Age, sex and citizenship	Japanese	Chinese	Filipino	Korean	White
Male					
Under 35					
Naturalized U.S. Citizen	5000	7090	6125	8000	8267
Alien	7184	6425	6078	8187	7572
Native born	7873	7437	6357	5500	7283
35-49					
Naturalized U.S. Citizen	9500	8071	8423	11875	10797
Alien	11060	6162	7205	8714	9292
Native born	10263	10871	8733	9800	9645
50-69					
Naturalized U.S. Citizen	7277	5987	6119	---*	8439
Alien	7125	4904	5075	---	6984
Native born	8808	8820	6392	---	8224
Female					
Under 35					
Naturalized U.S. Citizen	4000	3763	4125	3363	4002
Alien	2875	3967	4444	3045	3722
Native born	5074	4636	3257	3500	3523
35-49					
Naturalized U.S. Citizen	3482	3950	4263	3250	4095
Alien	3351	3366	4040	4100	3757
Native born	5034	5104	4155	4333	3947
50-69					
Naturalized U.S. Citizen	2500	3571	4550	---	4042
Alien	3166	2467	3214	---	3644
Native born	4298	4868	2700	---	4089

*Base less than 20 cases.

Table 6. 12. Median Earnings in 1969 of Persons, by Age, Sex and Weeks Worked in 1969

Age, sex and weeks worked	Japanese	Chinese	Filipino	Korean	White
Male					
Under 30					
13 weeks or less	$ 883	$ 925	$ 910	$1000	$ 866
14-26 weeks	2295	2500	2421	2300	2124
27-39 weeks	3769	3343	3323	---	3490
40-47 weeks	5714	4944	4541	---	5271
48-49 weeks	6454	4333	5708	5000	6246
50-52 weeks	777'	7644	6852	6642	7450
30-39					
13 weeks or less	611	1000	1562	---	1170
14-26 weeks	4750	2500	2750	3500	3602
27-39 weeks	5333	4500	3500	5000	5952
40-47 weeks	8650	6500	6437	6625	7879
48-49 weeks	9600	7750	7187	8250	9071
50-52 weeks	10663	9747	8239	9666	9707
40-49					
13 weeks or less	750	1375	791	---	1210
14-26 weeks	4000	1636	2625	---	3514
27-39 weeks	6071	4444	5375	---	6036
40-47 weeks	8400	6277	6700	---	8110
48-49 weeks	9285	7000	6375	8000	9480
50-52 weeks	10533	9448	8327	11381	9973
50-59					
13 weeks or less	2000	857	900	---	1210
14-26 weeks	---	2714	3750	---	3324
27-39 weeks	7500	3000	4250	---	5490
40-47 weeks	6781	5900	6250	---	7453
48-49 weeks	8961	6500	6366	---	8554
50-52 weeks	9326	8283	6902	---	9000
60-69					
13 weeks or less	1333	1125	1000	---	1131
14-26 weeks	1833	1500	1714	---	1877
27-39 weeks	3100	3125	3291	---	3702
40-47 weeks	4250	4300	4541	---	6254
48-49 weeks	6375	5350	5818	---	7391
50-52 weeks	7523	5803	5869	8400	7800

Table 6.12. Continued

Female					
Under 30					
13 weeks or less	707	750	739	687	651
14-26 weeks	1970	2208	2121	1615	1624
27-39 weeks	2950	3180	3183	3375	2665
40-47 weeks	4906	4575	4500	5100	3775
48-49 weeks	4800	4380	5500	3800	4201
50-52 weeks	5767	5589	5567	5323	4753
30-39					
13 weeks or less	606	628	750	625	616
14-26 weeks	1684	1956	2157	1937	1459
27-39 weeks	2892	2800	3250	2900	2539
40-47 weeks	4038	4472	5035	2944	3677
48-49 weeks	4772	4714	4807	4750	4081
50-52 weeks	5660	5767	6137	5468	4919
40-49					
13 weeks or less	663	714	515	833	624
14-26 weeks	1500	1733	1653	---	1518
27-39 weeks	2689	2718	2700	---	2544
40-47 weeks	3552	3937	4214	4500	3685
48-49 weeks	3962	4409	4892	3750	4142
50-52 weeks	5388	4882	4765	6111	4954
50-59					
13 weeks or less	750	863	562	---	637
14-26 weeks	2090	1444	1750	---	1521
27-39 weeks	2687	2843	4500	---	2729
40-47 weeks	3239	3058	4375	---	3871
48-49 weeks	4147	3642	4625	---	2159
50-52 weeks	5214	4536	4583	5250	4884
60-69					
13 weeks or less	785	450	571	---	695
14-26 weeks	2166	1400	---	---	1408
27-39 weeks	1944	1750	1000	---	2649
40-47 weeks	1888	2300	---	---	3602
48-49 weeks	2833	2375	---	---	3675
50-52 weeks	3925	3468	4500	4000	4545

Nonfarm Occupations

The earnings of Oriental men and women generally compare favorably with whites, especially among white collar occupations (Tables 6.13 and 6.14). Observations of differences among occupations are necessarily restricted to earnings from nonfarm occupations, and also by the adequacy of sample frequencies. As indicated earlier, earnings from farm and nonfarm occupations are not strictly comparable.

Differences in earnings by major occupation are not uniformly favorable to Orientals. Japanese, Chinese and Korean men in professional occupations generally average higher earnings than whites, but Filipino men do not. Among men at ages 35-49, only Chinese professionals average higher earnings than similar whites. At the managerial level, only Japanese men average as high or higher than white men; for sales workers, the earnings of Chinese men drop well below those of whites, as only the oldest Japanese salesmen earn more than comparable whites. Differences in earnings between Oriental and white men are relatively slight among clerical workers.

While the earnings of Japanese men typically tend to match or surpass the levels of white earnings, this is much less true for blue collar employment. This is evident, for example, in the sometimes lower earnings of Japanese in comparison with white men in blue collar jobs. Among relatively skilled craft workers, Japanese and Chinese men average slightly higher earnings than whites, but Filipino men average as much as $1,000 less than whites at the youngest and oldest ages. The earnings of Oriental men at the semiskilled level--operatives and transportation equipment operatives--tend to be lower than whites, although Japanese earnings are only slightly different from whites. Among service workers, earnings of white men also tend to average higher than Orientals, with the somewhat usual qualification for Japanese men ages 35 and older.

The average earnings of Oriental women are consistently higher than for white women in almost every major occupation group; the main exception is for operatives. At all age levels, Oriental women in white collar and service occupations receive higher earnings than white women. Earnings differences among women are sometimes rather large. For example, Japanese women average 20-25% higher than white women in clerical work. Among professional women, Oriental-white differences also run about 20-30% higher for Orientals.

To the extent that workers in the same major occupation groups are performing similar and equally demanding tasks, and also are equally well-educated and working about the same amount of time,

Table 6.13. Median Earnings in 1969 of Males, by Age and Nonfarm Occupation in 1970

Age and occupation	Japanese	Chinese	Filipino	Korean	White
Under 35					
Professional	$9428	$10134	$8194	$9500	$8959
Managerial	9676	8600	---	---	9119
Sales	7233	---	---	---	7934
Clerical	6696	5968	5325	---	6675
Crafts	8266	7441	6552	---	7637
Operatives	5363	4361	6178	---	6452
Transport. Eq.	5777	---	---	---	6798
Laborer	1375	---	4392	---	2914
Service*	4500	4215	3807	---	5844
35-49					
Professional	13061	14089	10709	11755	13298
Managerial	12421	9886	---	11250	12848
Sales	9900	8250	---	---	11087
Clerical	8790	8308	6911	---	8696
Crafts	10066	9895	8794	---	9379
Operatives	8958	6130	7227	---	8064
Transport. Eq.	8200	---	---	---	8366
Laborer	6850	---	---	---	4380
Service*	7476	4971	5727	---	7579
50-69					
Professional	12816	13230	9928	10833	12845
Managerial	12545	8260	---	---	11858
Sales	10000	5875	---	---	8909
Clerical	8218	7812	7305	---	8176
Crafts	9203	8950	7362	---	8446
Operatives	7333	5027	6416	---	7470
Transport. Eq.	7166	---	6291	---	7261
Laborer	6083	---	4711	---	3149
Service*	6088	4730	5506	---	5753

*Excluding private household service workers.

Table 6.14. Median Earnings in 1969 of Females, by Age and Nonfarm Occupation in 1970

Age and occupation	Japanese	Chinese	Filipino	Korean	White
Under 35					
Professional	$7060	$6294	$6660	$6714	$5332
Managerial	5750	---	---	---	4980
Sales	2555	---	---	---	1641
Clerical	5014	4388	4237	---	3941
Operatives	3090	2661	2666	---	3226
Service	3297	2470	2442	1794	1938
Private Household	---	---	---	---	689
35-49					
Professional	7663	8000	7884	7750	6154
Managerial	7305	6333	---	---	5564
Sales	3516	---	---	---	2499
Clerical	5694	5469	4616	---	4451
Operatives	3811	3322	3477	---	3977
Service	3220	3020	3507	---	2364
Private Household	1090	---	---	---	836
50-69					
Professional	8468	8611	---	---	7191
Managerial	8071	5357	---	---	5544
Sales	3285	---	---	---	2875
Clerical	5867	5321	---	---	4896
Operatives	---	---	---	---	3953
Service	3865	2789	3392	---	2625
Private Household	1697	---	---	---	983

earnings should be rather similar. Discrepancies between the average earnings of men and women appear to be too consistent and too large to be explained by differences in educational attainment or even by differences in time worked. Comparisons of earnings for all occupational levels and at three age levels show clearly that the earnings of women are invariably and substantially lower than for men of similar ages and in similar occupations. Moreover, the ratios of the earnings of white women to those of white men are typically lower than for the Oriental women in comparison with their masculine counterparts. The very strong indication from these observations is that sex discrimination in earnings is greater for whites than for Orientals. In one of the most extreme contrasts, white women in sales work average only $1,641 at ages under 30 and only $2,499 at ages 35-49, which is barely 20% as high as the earnings of white men in sales occupations.

Class of Worker

Employment in government results in higher earnings on the average than employment in private business or being self-employed for all Orientals (Table 6.15). White men employed in state or local governments, however, average lower earnings than those in private business or those who are self-employed. Earnings differences for men and women employed in private business and by the federal government are substantial. White men in federal governmental work average $9,169, or more than $800 higher than white men employed by private business. However, for Chinese men this difference is even greater, with those in federal averaging almost $3,000 higher than the ones in private business. Chinese men on the payrolls of state governments have the highest average earnings ($11,507), probably attributable to the relatively high number of Chinese professors in state universities. Women employed by the federal government average about $1,500 to $3,200 more than women in private business. White and Japanese women, for example, average over $2,000 more in earnings from federal employment than those in private business.

Patterns of intergroup and sex differences in earnings are not altered appreciably by controlling for class of worker. Japanese men and women average higher earnings than whites among all classes of workers. Most categories of Oriental women, in fact, average higher than white women. One notable consequence of the relatively high earnings for women in government employment is a narrowing of the sex gap in earnings. Although the earnings of women in government work remain lower than for men, the earnings differential is much less than between men and women in private business.

Table 6.15. Median Earnings in 1969, by Sex and Class of Worker

Sex and class of worker	Japanese	Chinese	Filipino	Korean	White
Male					
Private business	$8960	$6791	$6018	$8236	$8314
Federal government	9575	9703	7707	9333	9169
State government	9725	11507	7545	9625	8222
Local government	9156	9690	6906	8500	8265
Self-employed	8800	7565	7772	7916	8446
Female					
Private business	4210	3730	3926	3317	3702
Federal government	6570	6769	5518	6500	5880
State government	6411	6217	5875	6375	4917
Local government	6528	6204	6520	6200	4960
Self-employed	3414	3428	2833	2500	2722

Marital Status

As is well-known, marital status is differentially related to levels of earnings between the sexes. Married men living with spouses obtain higher wages and salaries for all groups and ages than never married men, whereas married women tend to have lower earnings than single women (Table 6.16).

Regardless of marital status, high levels of earnings are more characteristic of Japanese men in most age categories than other groups of men. Differences in earnings among other Oriental and white men are generally small, with Filipino men earning the least.

Japanese women also maintain a high position in earnings. Among women under 40 years of age, Japanese have the edge over other working female groups in median earnings. Korean women tend to experience their lowest levels of earnings at these younger ages, while showing their superior earnings at ages 40-49. These patterns exist among both married, spouse present, and single women. Patterns of differences in earnings among Chinese, Filipino and white women show a general tendency for Filipino women to rank high among married but lowest among never married women.

Fertility

High fertility and low incomes generally go together, and in this respect Oriental women are no exception. A general inverse relationship exists between earnings and the number of children ever born among Oriental and white women (Table 6.17). This pattern is most pronounced among Japanese and white women, where average earnings consistently decline with increased numbers of children in all three age groupings. Among Chinese, Filipino, and Korean women, a few irregularities can be noted, but the inverse relationship between earnings and fertility remains the dominant pattern. The difference in earnings between women with no children and those with five or more is in the neighborhood of $1,000 to $2,000 for any particular group under 50 years of age. Somewhat smaller differences appear at older ages (50-69).

Among women under 35 years of age, Korean and white women generally have lower earnings than other groups. Japanese rank considerably high in this younger age category, particularly among women who have had less than three children.

Table 6.16. Median Earnings in 1969 of Married With Spouse Present and Never Married Oriental and White Workers by Sex and Age

Sex, age, and marital status	Japanese	Chinese	Filipino	Korean	White
Male					
Under 30					
Married, spouse present	$8395	$7571	$6745	$7000	$7453
Never married	4780	3804	3636	4833	3661
30-39					
Married, spouse present	10863	9538	9125	9416	9644
Never married	7955	7310	5933	5100	7352
40-49					
Married, spouse present	10738	9096	8185	12142	9909
Never married	8102	7450	5409	6500	7104
50-59					
Married, spouse present	9366	8053	7011	9500	8874
Never married	7666	6125	5233	5500	6421
60-69					
Married, spouse present	7040	5450	5633	8500	7351
Never married	4500	4000	4555	---	5050
Female					
Under 30					
Married, spouse present	4959	4262	4400	3350	3486
Never married	4554	3864	3775	3500	3488
30-39					
Married, spouse present	4342	4000	4398	3636	3263
Never married	6547	6000	4977	3833	5939
40-49					
Married, spouse present	4355	3870	4090	5500	3744
Never married	6479	6916	5700	7500	6141
50-54					
Married, spouse present	4229	3557	4275	4375	3904
Never married	6000	5500	3166	4500	5924
60-69					
Married, spouse Present	2700	2714	3400	---	3418
Never married	4000	4625	2000	---	5393

Table 6.17. Median Earnings in 1969 of Women, By Age and Number of Children Ever Born

Age and number of children ever born	Japanese	Chinese	Filipino	Korean	White
Under 35					
None	$5064	$4455	$4368	$3615	$4019
1	4866	4394	4263	2944	3310
2	4812	3476	4020	3625	2859
3	3850	3035	4178	3125	2562
4	3357	3928	3562	2750	2375
5 or more	3357	3500	2600	1500	2266
35-49					
None	5540	4880	4814	3375	5568
1	4765	4411	4950	3666	4435
2	4538	4517	4272	3600	3945
3	4198	3792	4437	4428	3601
4	3773	3644	4043	4600	3313
5 or more	3500	3250	3645	6250	3040
50-69					
None	5266	3687	4125	4666	5010
1	5000	3250	5125	5000	4229
2	4333	3537	4318	4500	4063
3	3880	3023	4000	3500	3740
4	3774	3928	3611	2500	3473
5 or more	3535	3261	3700	3000	3087

Between ages 35-49, Japanese, Chinese and Filipino women maintain a slight advantage over Korean and white women in earnings. Koreans tend to earn less among women who have born no more than two children, while whites tend to rank the lowest among women with three or more children.

In the oldest age category, 50-69, Korean and Chinese women show some of the lowest levels of earnings along specific parity levels. However, the observed differences are not consistent in pattern.

Furthermore, the same inverse pattern between earnings and fertility is generally observed when fertility is defined by number of related children under six in the household among evermarried working women. Table 6.18 shows that, for all groups, earnings of childless women tend to be higher than those with one or two children under six.

As a group, Oriental women average higher earnings than white women regardless of the number of children under six in their care. Japanese and Filipino women, in particular, exhibit superior earnings levels.

SUMMARY

In view of the historical trend of discrimination against Orientals in the United States, the pattern of similarities in the earnings of Orientals and whites by 1970 takes on special significance, since it suggests that being non-white in the U.S. is not tantamount to economic hardship. Moreover, with the exception of Filipino men, Oriental men and women tend to average earnings as high as or higher than comparable whites. The relatively small degree of differences in earnings is not surprising in view of the rather striking similarities in labor force participation, occupational achievement and mobility noted in the preceding chapters. There are, of course, specific differences in earnings patterns which merit specification.

First, however, it may be emphasized that Orientals and whites appear to respond in much the same way to determinants of earnings. Variations in earnings by age education, vocational training and disability follow the same patterns for Orientals as for whites. Earnings tend to peak at the middle adult ages and to increase in direct relation to higher levels of educational attainment, to the experience of vocational training for women and to the absence of a disability. For both Orientals and whites, earnings are also directly related to levels of occupational achievement and to the numbers of weeks and hours worked. For women, earnings are inversely related to their fertility and the presence of preschool-age children at home.

Table 6.18. Median Earnings in 1969 of Evermarried Women, 25-44 Years Old, by Age and Number of Children Under 6 in Household

Age and children under 6	Japanese	Chinese	Filipino	Korean	White
25-29					
None	$6120	$5468	$5187	$3600	$4841
One	5354	4666	5272	3666	3217
Two	4785	3125	4166	3166	2055
30-34					
None	4705	4687	4750	3850	3735
One	4600	4125	4500	3875	2921
Two	3666	2833	5000	2000	2109
35-59					
None	4000	4130	4454	3300	3634
One	4200	3500	4500	3250	2949
Two	3900	4000	4000	---	2458
40-44					
None	4444	4275	4297	5062	3861
One	4300	2937	4153	6833	3194
Two	3250	2000	3333	---	3055

More central to the objectives of this study are questions of whether differences in earnings reflect intergroup inequalities and/or discrimination. Therefore, despite the general picture of similarities, there are several consistent patterns of differences in earnings. The median earnings of Japanese men and women typically approximate those of white men and women. But with the institution of various controls--for age, education, occupation, weeks and hours worked, and so forth--Japanese men and women tend to average slightly higher earnings than whites. On the surface, these results suggest the possibility of "reverse discrimination," that is, among all the many comparisons of Japanese and whites who are approximately equally well-suited for achievement in the labor market, the earnings of Japanese are rather consistently higher than earnings of comparable whites. In this context, however, one should not overlook the important influence of cultural factors and selective immigration.

In contrast, Filipino men consistently average lower earnings than white men. Whether comparisons are based on college graduates, full-time workers or employees of private businesses, Filipino men do not receive as much in earnings from their work as whites. Interestingly, Filipino women do much better in comparison with white women.

In comparison with the earnings of whites, Americans of Chinese and Korean descent differ very little, and differences where present are generally slight and not consistently in favor of the Chinese and Koreans. Only minimal redistributions of earnings would be necessary to equalize completely the earnings distributions of Chinese and Koreans with comparable whites.

The largest differences in earnings are the discrepancies between the sexes. Whereas differences in earnings between Orientals and whites as a whole are small, the earnings of women are consistently far below the levels for men. The fact that sex differences in earnings occur within the relatively high income Oriental and white populations is itself significant. But even more important is the fact that women almost invariably average lower earnings. Controls for age, education, vocational training, disability, weeks and hours worked and class of worker fail to diminish the sex gap in earnings. Only when single women are compared with single men is there any notable reduction of sex differences in earnings. Furthermore, it appears that the earnings of white women suffer more in comparison with the earnings of white men than is true for Oriental women.

CHAPTER 7

IMPLICATIONS OF CONTEMPORARY ORIENTAL ACHIEVEMENT

Orientals in the United States have successfully established themselves as able competitors in the labor market. As a "new middle class" they are highly educated, active participants in the labor force, employed in upper-level white-collar jobs and earn relatively high incomes. In short, they are a select group whose status achievements are unlike those of the earliest Oriental immigrants and the currently disadvantaged Mexican, Puerto Rican, American Indian or black. On the basis of their accomplishments in the labor market, they are no longer a disadvantaged minority. As much of the evidence in this study demonstrates, Orientals often equal or surpass the levels of socio-economic status attained by whites.

The generally favorable picture of Oriental achievements does not mean that Orientals are without problems in the United States. Like many American workers, they do not always succeed in finding employment or a better job with higher pay. Individual Orientals sometimes have great difficulty in adjusting to American society and are handicapped because of language and cultural differences. Individual Orientals also may experience discrimination because of their heritage. Vestiges of the earlier anti-Oriental movement persist and in certain localities hostility is still relatively strong. Many of the problems confronting Orientals are not unique, although they lie beyond the scope of this study: problems of housing, transportation, credit, health care and so forth.

In attempting to synthesize and interpret the large amount of detailed information presented in the foregoing chapters, questions of inequalities and discrimination provide a focal point. Since each chapter includes a summary, detailed summaries are not repeated at this point. Following a brief profile of the status achievements of Orientals, discussion will turn to broad and basic policy questions.

INEQUALITIES

Inequalities among Orientals and between Orientals and whites are relatively minor, although they are evident in labor force participation, occupational achievement, mobility and earnings. As observable differences, inequalities do not necessarily mean discrimination. The view of inequality presented in Chapter 1 is that intergroup and sex

differences in one or more components of status in the labor market are regarded as discrimination only when such inequality occurs among equals. Therefore, discrimination occurs only when persons equally well prepared for participation and achievement fail to achieve similar status in the labor market. It is quite conceivable, of course, that inequalities in achievement may not be evident even though discriminatory behavior may characterize the processes involved in accomplishing a particular status in the job market. Attention in this study has been on status as an end product, rather than as a process.

This view of inequality differs from others, not from the standpoint of detecting an inequality but as a matter of the meaning of inequality. Jencks (1972), for example, treats economic inequality as something to be eliminated. He not only suggests that differences in occupational status and income should be eliminated, but he argues also that competence be equalized. He proceeds to argue for equalizing competence by making this an explicit objective of social policy (1972:263), even though there is no obvious way of bringing this about. This single, isolated example suffices to show that differences in the meanings and interpretations of inequality exist.

The broad profile of inequalities between Orientals as a whole and white workers shows Orientals in a favorable light; more glaring are inequalities between the sexes. Differences in labor force participation and employment between Oriental and white men and between Oriental and white women are relatively slight, as shown in Chapter 3. At the prime working ages, about 90% of Oriental and white men are in the labor force. Japanese and Chinese men average about the same level of occupational achievement as whites (Table 7.01). Korean men rank highest of all on occupational achievement and Filipino men the lowest among men. White, Korean and Filipino men are the most occupationally mobile, and white and Korean mobile men are the most upwardly mobile. Filipino men's degree of upward mobility is the lowest and they also move the shortest fraction of the distance toward the top of the occupational structure. Both Japanese and Korean men average higher earnings than white men, whereas Chinese and Filipinos average less. Comparatively disadvantaged are Filipino men whose average earnings were about $2,600 less in 1969 than the earnings of Japanese men and $2,000 less than for white men.

On the basis of these very gross comparisons, Korean men tend to outrank white men in their status achievements in the labor market. At the other extreme, Filipino men rank lower than whites and also lower than other Oriental men. The achievements of Japanese and Chinese men are similar, although inequalities in earnings place Chinese men well below Japanese and white men. Korean men are heavily concentrated in upper-level white-collar occupations. This concentration and their comparatively successful upward occupational mobility contribute to

Table 7.01. Summary of Occupational Achievement, Mobility and Earnings

	OCC 70	Mobile	Percent Up	RMS Up	Median earnings
Male					
Japanese	48	29	56	32	$9048
Chinese	44	30	57	36	7631
Filipino	38	34	50	27	6390
Korean	60	35	66	38	8506
White	46	37	60	28	8369
Female					
Japanese	30	33	45	26	4563
Chinese	30	29	43	28	3938
Filipino	34	41	34	22	4197
Korean	28	34	52	29	3680
White	31	37	47	24	3831
Ratios, female:male					
Japanese	.62	1.14	.80	.81	.50
Chinese	.68	.97	.75	.78	.52
Filipino	.89	1.20	.68	.81	.66
Korean	.47	.97	.79	.67	.43
White	.67	1.00	.78	.86	.46

their high average income. Filipino men rank much lower because of their concentration in farm and lower blue-collar jobs from which they are comparatively unsuccessful in moving up the occupation scale. Similarities in the achievements of Japanese and white men are generally so striking that inequalities are often difficult to discern. The average status achievements of Chinese men also closely resemble the levels attained by Japanese and whites, although the bi-polar occupational distribution of Chinese men contrasts with Japanese and white distributions. Relatively few Chinese men are employed in middle-level occupations which leaves two distinct concentrations, one relatively high and the other low.

Inequalities between Oriental and white women are even less than for men. Among women, the relative positions of the Oriental populations differ from the overall rankings of men. Filipino women compare very favorably with white women, except for their upward occupational mobility (Table 7.01). On their level of occupational achievement, the incidence of occupational mobility and the average levels of earnings, Filipino women outrank white women. Unlike the low achievements of Filipino men, Filipino women rank comparatively high among women. Directly the opposite pattern occurs for Koreans; women of Korean descent tend to rank low on most of these summary indices. Differences between white, Japanese and Chinese women are minimal, although the average earnings of Japanese women represent the highest earnings for women.

The magnitude of sex inequalities is so much greater than intergroup inequalities that it tends to overshadow the degree of differences between Orientals and whites. With the exception of the incidence of occupational mobility, Oriental and white men consistently outrank women by a wide margin (Table 7.01). Partly because of the relatively low occupational ranking of Filipino men, Filipino women come relatively close to matching the occupational levels of Filipino men. Korean women, however, are able to average only half as high a level of occupational achievement as Korean men. Japanese, Chinese and white women average about two-thirds as high as the occupational achievement of their men. The occupational mobility of women is less successful than for men, but it is on earnings where women compare least favorably with men. Japanese and Chinese women average only about half the earnings of Japanese and Chinese men, while white and Korean women average less than half as much. Only Filipino women were able to attain earnings much above the fifty percent level of their male counterparts.

The relatively narrow range in status inequalities between Orientals and whites implies that discrimination in the labor market against Orientals is also relatively mild. Most of the findings in this study are consistent with this interpretation. However, the broad profile needs qualification. First, it must be emphasized that this general conclusion is based on aggregate data and therefore reflects national averages. There is evidence that individual Orientals do in fact experience discrimination (U.S. Congress, 1974). The general results of this study show nevertheless that major segments of the Oriental population sometimes rank higher than comparable whites, e.g., the average earnings and occupation scores of Japanese and Korean men.

Inequalities between Orientals and whites, therefore, appear to be advantageous to Orientals in some instances and not in others. Fundamentally important is the fact that status differences tend to diminish among those well qualified and ready for work. Differences in participation and achievement between Orientals and whites are small among those (a) with a college education, (b) with job training, and (c) without a disability. With these operational definitions of being "equally well qualified," differences between Orientals and whites became even less than suggested by overall patterns of inequalities.

Among those least well prepared for participation and achievement, intergroup differences were relatively large. Oriental men and women with relatively little education, for example, typically failed to achieve as high a status as whites similarly lacking in educational attainment. Discrimination thus appears greater among the most disadvantaged and culturally handicapped Orientals.

Sex discrimination in the labor market is far more obvious than intergroup discrimination. Women's labor force participation is less, their occupational achievement lower, their occupational mobility less frequent and less rewarding in terms of upward movement, and their earnings appreciably lower. Men consistently outrank women throughout this study, despite controls for influences of educational attainment, vocational training, disability, class of worker, and weeks and hours worked. If there were no sex discrimination, similar levels of educational attainment should lead to similar levels of participation and achievement. However, women's status was invariably lower than men's when levels of educational attainment were equated.

The status of women in American society is undergoing rather drastic change at the present time. The labor force participation rate for all married women increased from 26% in 1953 to 42% by 1973. Despite

such changes, women in the labor force remain largely confined to traditional female jobs and their earnings are only about half as high as men's.

Traditional norms of behavior and customary beliefs and actions are among the greatest obstacles to the reduction of sex inequalities in the labor market. Oriental and other women are disadvantaged as a result. As most Americans learn at a relatively tender age, women are expected to become wives and mothers whose "proper place" is in the home. Historically, married women have derived their socio-economic status from that of their husbands, or, in general, females derived their status from male household heads. Women who venture into the job market are generally expected to enter the traditionally defined female jobs.

While both traditions and the status of women are in a state of flux, advancement of women in the labor market continues to be slowed by the inevitability of childbearing and still rather conventional practices of childrearing. Having children frequently leads to absence from the labor force, first for childbirth and often for varying lengths of time while children are growing up. Marriage alone reduces women's chances of labor force participation, and these chances are reduced further by the presence of young children at home. Never married women obtain jobs and achieve status in about the same ways as never married men, although married men achieve at a higher level than all single persons.

In the realm of marriage and motherhood, Oriental women are not greatly different from other women. But one exception to the retarding influence of children appears among Oriental women. Chinese mothers showed higher levels of occupational achievement than childless ever married Chinese women. This was true also for Filipino women, although to a lesser extent than for the Chinese. This rather unique situation apparently results from a cultural carry-over in which middle class Oriental mothers are inclined to be employed and their background leads them to comparatively high occupational levels. By Oriental custom, older children help to take care of younger ones thereby relieving mothers of their family duties during the day. Hence, this Oriental "day care" program is conducted within the home and family.

Employed married women also experience restraints in the job market resulting from the husband's employment. Since wives tend to remain with their husbands, a wife's participation in the labor market is influenced by the location of her husband's employment. When a husband changes jobs and relocates in a different community, a wife's job horizons are governed by his location and movement. Some have argued that women are concentrated in such jobs as teaching and secretarial work, because their employment prospects are relatively good wherever she and her husband may happen to live.

POLICY IMPLICATIONS

Information in this study bears both directly and indirectly on a number of policy issues. In bold relief, Orientals in the American labor market compare favorably with whites, but Oriental and white women lag behind men. Five broad policy areas will be discussed briefly and in very general terms: preparation for employment and achievement, discrimination by employers and labor unions, immigration and citizenship, sex discimination, and related areas not directly examined in this study.

The importance of skills and a general preparation for employment and achievement has been demonstrated repeatedly in a number of studies. Those with the most adequate preparation, as indicated by such measures as years of school completed, also tend to rank high on labor force participation, employment, occupational achievement, mobility and earnings. The high average levels of educational attainment for Orientals may well explain much of their success in the labor market. Korean and Japanese men, for example, not only average higher educational levels than white men, they also achieve higher levels of occupational status and earnings. Success of the Orientals strongly suggests that Spanish, American Indian and black minorities might improve their positions if only they could raise their levels of educational attainment.

Action to improve the educational levels of the more disadvantaged minorities is not a panacea but nevertheless should reduce the magnitude of intergroup inequalities. Educational attainment is particularly important as a determinant of the first job and early career of a worker. There is evidence, however, that the effects of educational attainment diminish the longer a worker is in the job market (Blau and Duncan, 1967). The importance of formal schooling declines as a worker gradually acquires experience and develops specific skills on the job. A recommendation to elevate the average educational levels of disadvantaged peoples does not mean that everyone should attain the same educational level. What it does mean is that the averages for all groups be about the same. If everyone were a college graduate, for example, a great many would be inappropriately qualified or "overqualified" for the present requirements of work tasks.

Orientals have not participated as extensively as others in vocational training programs. For Orientals in upper white-collar occupations, especially in the professions where they are relatively concentrated, there may be little need for job training. Preparation for the professions usually takes place within colleges and universities. If Orientals are to be employed more frequently in nonprofessional white-collar, blue-collar and perhaps

farm occupations, improved opportunities for training in these areas should improve chances for employment. This implies a desire on the part of Orientals for such work and also a reduction of resistance and opposition to their employment. In keeping with general principles, all Orientals should have adequate opportunities for appropriate job training.

Especially pertinent to effective participation in training and employment is some minimal command of the English language. As is true for many immigrants, Orientals are often handicapped by a more or less limited ability to communicate effectively in English. A number of the most recent immigrants have had several years of English in school before their arrival in this country and they are quite capable of communicating in English. The greatest need, of course, is among those who have little or no instruction in language. Whether a part of job training or not, opportunities for mastering the English language should be made available to all immigrants.

Organized labor was opposed to the employment of Chinese and Japanese workers almost from the time of the earliest arrivals, and this opposition has continued to the present time. A major factor in the relative absence of Oriental craft workers is their exclusion from labor unions. Lyman (1974:138) reports that major labor unions continue to discriminate against Chinese in craft and industrial pursuits by restricting entrance to the unions and barring apprenticeship training. San Francisco unions involved in construction and related jobs reported only 97 persons of Oriental ancestry among more than 9,000 journeymen and only 14 Orientals among 684 apprentices (Lyman, 1974:138). About 38% of the 9,000 women employed in San Francisco's lady's garment industry are Chinese and only about one out of five work under union protection. (Lyman, 1974:154). Discriminatory practices of labor unions must be reduced and controlled to assure equal treatment for all workers, including Orientals.

Discriminatory employment practices on the part of employers must also be reduced. Although this study includes no direct information on hiring practices, the findings on sex discrimination clearly show that discriminatory employment procedures have been followed by a number of employers. Not quite so obvious but nevertheless evident is the fact that Orientals with low levels of educational attainment do less well than similar whites. With the present national commitment to equal rights and opportunities, such employment procedures can no longer be condoned.

A major consequence of recent immigration from the Orient has been an increase in the number of highly educated and skilled persons who have entered the American labor market in such occupations as physician, engineer and teacher. This has come about largely because of the very selective nature of the immigration process, and what the United States gains in talent and manpower the sending nations lose.

Based largely on a principle of expediency, American immigration policy has changed from one of "open door" for the early Chinese and Japanese to one of "close door," beginning with the Chinese exclusion of the 1880's, and continuing with the national origins quota system barring Asiatics, and finally, since 1965, a system permitting immigrants from all countries. The present policy is essentially nondiscriminatory on the basis of national origin and race and consistent with the general shift in national policy toward equal opportunities and rights. For this reason the present open-door policy should be maintained and administrative procedures made more efficient.

Continuance of the present immigration program--or any modifications in it--carries further implications. Labor supply and demand factors can and often do change quickly, and during periods of economic recession and high unemployment Oriental and other immigrants may become targets of forces opposing "threats to the American worker." There is ample historical precedent for such opposition and within the nondiscrimination framework policies and procedures should be developed to curb actions by employers, labor unions and others aimed at restricting Oriental immigration and jeopardizing their employment rights.

While there is no moral or legal basis for the continuance of sex discrimination, the perseverance of customs and traditions mentioned earlier constitutes a substantial obstacle to the reduction of discrimination against women. As with many fundamental changes in the structure and operation of a complex society, the elimination of sex discrimination may be somewhat slow and possibly painful. But the nation is committed to equal rights, and existing laws and regulations should be fully enforced.

Changes in the status of women in American society have far-reaching implications which extend well beyond the scope of this study. The full implications of these changes can not be explored here, partly because it is too early in the movement toward sex equalization to assess its ultimate impact in such areas as marriage, the family and childrearing. The impending changes are great and so too their implications throughout society. Despite the uncertain, long-run future, an immediate goal for women is to improve their chances for achieving equality in the labor market with men.

Policies and programs are already operative to help women have as many children as they want, and only as many, and to provide care for their children while they work. In general terms, the most appropriate recommendation is for "more of the same." Family planning and day care services and facilities should be extended to all women who need or desire such assistance.

Space limitations preclude more than brief mention of other policy-program areas. These are essentially areas which indirectly influence labor market activity and represent nonskill factors which may impede

participation and achievement. Minorities--and all people--need access to adequate health facilities and services. They also need adequate transportation, so that neither health nor transportation problems become barriers to their employment. Policies and procedures for attaining citizenship should be streamlined and made more conducive for the foreign born to become naturalized citizens. The dissemination of employment information should be developed more efficiently and the system of job referrals made more effective for all minorities.

APPENDIX A

MEASURES OF OCCUPATIONAL ACHIEVEMENT, MOBILITY AND DISSIMILARITY

Results of analysis based on measurement of variables are dependent on underlying assumptions and on specific computational procedures. For these reasons, three of the measures employed in this study are described in order to help clarify what lies behind the measures. This description also should enable others to duplicate or modify the computational routine.

OCCUPATION SCORES

Some means of measuring occupational status is essential for the study of occupational achievement and mobility. Since occupations are nominal categories with no inherent ranking, a measure was sought which would provide a basis for ranking occupational categories from high to low on an underlying variable which might be termed socioeconomic status.

Background

Efforts to measure occupational achievement (prestige or socioeconomic status) extend over the past half century. Counts's (1925) study was one of the first attempts to measure the prestige of occupations. In Mapheus Smith's (1943) study of occupational prestige, thirteen studies were cited which were derived from the work of Counts. A major landmark in studies of prestige is the frequently cited National Opinion Research Center (NORC) survey of the "general standing" of 90 occupations (1947). Reiss (1961) and others have discussed problems involved in the construction of the NORC prestige scale, but the NORC (or North-Hatt) scale remains essentially intact today as one of the best methods of assessing occupational prestige. As noted by Reiss (1961), alternative methods, such as Guttman scaling techniques, successive-interval scaling, and paired-comparisons, have generally been less successful than the NORC scales in yielding occupational prestige measures.

Paralleling attempts to measure occupational prestige is a number of efforts to measure "socioeconomic status." Beginning in 1917, the work of Alba M. Edwards was aimed at developing an ordinal ranking of occupations

using census data. Since 1960 there have been at least three notable attempts to measure occupational achievement. The U.S. Bureau of the Census (1963) calculated occupation scores for chief income recipients in families and for unrelated individuals by a simple averaging of three components: education, family income, and occupation. All members of a family were assigned the same score as the chief income recipient. Bogue (1969) proposed a measure of socioeconomic achievement (SEA) based on income and education. His SEA score was derived by averaging income and education scores which were both measured in standard money units. A third approach is best illustrated by the work of Duncan (1961; Blau and Duncan, 1967). His socioeconomic index (SEI) was designed to optimally reproduce a set of NORC occupational prestige ratings. First with 1950 and later with 1960 census data, summary measures for education and income were developed. The first was the percent of workers with four or more years of high school and the second the percent with incomes of $3,500 or more (in 1949). After first standardizing by age, regression weights were used to assign scores to all census occupations. The resulting SEI values, with a range from 0 to 96, resemble the index values of Bogue and others.

Duncan's SEI was based on the empirical formula

$$X_1 = .59X_2 + .55X_3 - 6.0$$

where X_1 represents the "high" ratings received by an occupation in a prestige survey, X_2 the proportion of persons in an occupation with incomes of $3,500 or more and X_3 the proportion of men in an occupation with four or more years of high school.

Rarely has there been much criticism or suggestion for modifying the SEI. An exception to this is Cain's critique. Cain (1974) argues that Duncan's occupational achievement measure could be altered in a very simple way without much change in results. He points out, for example, that a simple sum of the proportions above the specified levels of earnings and education would probably serve as well as the use of regression weights.

Given the problem of constructing an index to measure the level of achievement for occupations listed in the Census of Population, a decision was reached to adapt Duncan's SEI with relatively minor modifications. The use of education and income to measure the status level of an occupation has precedent and grounding in theory. Education is related to occupation and income, both functionally and temporally. Most people in the labor force have completed their formal education. A major part of acquiring the necessary qualifications for an occupation is termed education. Ordinarily, income from earnings is a direct consequence of employment in some specific occupation. An occupation is logically prior to earnings in the sense that income derived from an occupation is acquired subsequent to

the entry into and pursuit of an occupation. Occupation thus becomes an intervening link between education and income.

Assumptions

The construction of a measure of occupational achievement is necessarily based on a number of assumptions, some of which are concerned with measurement theory and others with social and economic circumstances in the real world. Although not immediately important to the analysis and interpretation of findings in this study, it was assumed that the scale of occupational achievement is stable over a period of time. This means that a scale measuring occupational achievement as of 1970 is comparable to one which might have been used 20 or 30 years earlier. Evidence to support this assumption is largely indirect. In comparing their SEI with earlier measures, Blau and Duncan (1967:121) conclude that the error induced by historical variation in the relative status of occupations is relatively minor.

The assumption that occupations are more or less continuously graded appears to be justified. Examination of the characteristics of persons employed in specific occupations indicates that occupations overlap in their distributions of income and educational attainment. There are no natural "cutting points" between such groupings as white-collar and blue-collar occupations or between farm and nonfarm occupations. Therefore, if occupational achievement is viewed as manifesting continuous variation, it is appropriate to regard occupational achievement as a quantitative variable.

Evaluation of relationships between the SEI and both education and income suggests the possibility of spurious results, since education and income are components of the measure of occupational achievement. In response to this criticism, Blau and Duncan (1967:124-125) argue that occupation scores are derived from aggregate data on all persons in an occupation category and applied as scores characterizing individuals. Therefore, as a measure of achievement (or prestige), the SEI should legitimately reflect the fact that a major determinant of achievement is education. Consistent with this is the argument that income from earnings is a major consequence of occupational achievement. Blau and Duncan (1967:127) found that, when education was eliminated from the index, results of intergenerational mobility analysis were not materially effected.

Attempts to measure occupational achievement imply a number of assumptions about the nature of a society, such as its value system, institutional structure, social stratification and urbanization. American society is generally regarded as an open-class system in which up-mobility

is highly valued and achievement of higher status is a desirable goal. Consistent with this is the notion that everyone should have an opportunity to improve his position in life. A drive for achievement is thereby created and nurtured within society itself. This leads to expectations and aspirations on the part of individuals for the attainment of higher status. An important part of all this is the principle of equal opportunity, according to which people who are equally well qualified should have equal chances to achieve given occupational levels.

A potential source of bias and distortion exists in measures of occupational status and prestige when they are constructed on the basis of characteristics of some particular segment of the population. In Duncan's original index construction (1961:118), for example, the SEI was based solely on the characteristics of men in the labor force, and Bogue's SEA (1969:444) pertained only to men in the experienced civilian labor force. Duncan's rationale was that the social status of a family is more likely to be a result of the husband's occupation than that of the wife, if both were employed. This may have been more true in 1950 than it is today. With the increased employment of women, it becomes less and less certain that wives "derive" their status from that of their husbands. Moreover, when the unit of analysis is the individual, it seems inappropriate to rely on the characteristics of one type of person to reach conclusions about another and different type of individual. These observations suggest that occupation scores may need to be constructed for various segments of the population.

Questions about the nature of the underlying American society continue to pose real difficulties with regard to the measurement of status achievement. Reiss (1961:107-108) raises the question as to whether there is a single value system in American society governing status evaluations. He noted considerable variations in individual evaluations of the general standing of occupations rated in the NORC study and that such variation may result partly from systematic variation in ratings among subgroups of the American population.

In grossly oversimplified terms, this issue may be viewed as a question of whether occupational achievement in American society is basically open or pluralistic (competitive or segregated). As an assumption, the open-society view holds that everyone has an equal opportunity in the competition for occupational achievement. Therefore, all persons should be judged on the same basis. In applying this notion to occupation scores, it would mean that all persons in a given occupation should have the same score. If American society is truly open, this argument is certainly acceptable. Everyone is judged by the same standards.

A major competing hypothesis holds that American society is essentially pluralistic when it comes to occupational achievement. Under pluralistic

conditions, workers compete within "their own groups" for occupational status. Furthermore, in each of a number of pluralistic groups a given occupation may be evaluated differently and perhaps also by different standards. If American society is more nearly pluralistic than open, measures of occupational achievement should reflect the underlying pluralistic conditions. As long as men compete among themselves for jobs that are defined as primarily male, and women compete among women for "female jobs," pluralistic conditions exist. Similarly, if Spanish origin men compete primarily for jobs that are defined as appropriate for them, they are not really in competition with others.

In the absence of overwhelming evidence that American society is either open or pluralistic, a considered guess is that reality lies somewhere between these extremes. For some persons and under some conditions, access to jobs is essentially open. For others and under different conditions, not all jobs are equally accessible. Women, for example, have been traditionally and systematically excluded from such jobs as airline pilots, tool and die work, and railroad "brakemen." Puerto Ricans have found their greatest opportunities as operatives in factories, while Mexican men have disproportionately found their opportunities as farm wage workers. Black women are still found heavily concentrated in the private household worker category, while black men are mainly blue-collar workers. This historically or traditionally predominant pattern of sharply different distributional patterns by color, ethnic and sex characteristics persists today, although there are signs that the traditional system of pluralistic occupational achievement is moving toward open competition.

A major task is to try to determine the extent to which occupational achievement occurs under conditions of pluralism. While the final answer may be unobtainable, the strategy nevertheless will be to examine alternative possibilities. Preliminary work suggests evidence favoring the pluralistic argument (Wilber and Hagan, 1974), but further analyses and evaluations will be undertaken in an effort to resolve this issue. In the meantime, occupation scores have been calculated under alternative assumptions about the degree of pluralism in American society. The occupation scores employed in this report are based on the assumption of open competition, i.e., everyone is scored on the same basis. The most immediate and obvious advantage of constructing and applying scores in this way is that it facilitates intergroup comparisons.

Procedures

The general steps in the actual calculation of occupation scores can be sketched briefly. As a preliminary the list of occupations was reduced to a list of 203 from some 400 included in the census detailed list of

occupations. This was done primarily because sample frequencies for some occupation categories were expected to be too low for purposes of determining scores. Since age distributions tend to vary from one occupation to another, Duncan's technique of age standardization was used. This involves the construction of five matrices to be used in the age-standardization process.

1) Age-occupation matrix: 56 age categories x 203 occupations
2) Education-age matrix: 21 education categories x 56 ages
3) Income-age matrix: 42 income levels x 56 ages
4) Income-occupation matrix: 42 income levels x 203 occupations
5) Education-occupation matrix: 21 education categories x 203 occupations

Matrix 4 was produced by multiplying matrices 1 and 3 and matrix 5 by multiplying matrices 1 and 2. The results of these calculations were used to determine the proportion above the median levels of education and income for each occupation. The age-adjusted proportion above the median levels for education and income is simply the difference between the overall proportion above the respective medians in the labor force and the difference between the actual and expected proportions. The final estimating equation is

$$Y = .59X_1 + .55X_2$$

where X_1 is the age-adjusted proportion above the median education level and X_2 is the age-adjusted proportion above the median income level. For convenience, the resulting occupation scores were rescaled to the range of zero to .99. The final scale is thus very similar to Duncan's SEI, but not identical. Duncan's SEI has a slightly smaller range of possible values (an upper limit of .96), and he used fixed levels of education and income rather than medians in determining the proportions who were "high" for each of the two components.

RELATIVE MOBILITY SCORES

One of the more difficult measurement problems in this study is posed by occupational mobility. Movement of workers between occupational categories can be determined rather easily, but whether such movements represent upward or downward moves requires at least an ordinal ranking of occupations. Furthermore, the distance of movement from a point of origin represents an important component of occupational mobility that is impossible to obtain by analyzing movement between and within categories.

In seeking a measure of occupational mobility, several standards were established. (1) The measure should be sensitive to both distance and direction of movement. (2) It should be free from the influences of occupational origin. (3) Identical index values should result whenever workers move the same relative distances. (4) Differences in the magnitude of index values should reflect differences in the distance moved. The resulting index values should also permit assignment of mobility scores to individual workers that can be interpreted as indicators of selected components of occupational mobility.

The measure developed for this study, the Relative Mobility Score (RMS), appears to meet these criteria. RMS measures the fraction of the maximum possible change in occupation score regardless of the level of occupational origin. In general terms this can be expressed as:

$$RMS = \frac{D - O}{L - O}$$

where the numerator is the difference between the levels of occupational destination, D, and origin, O, and the denominator is the difference between the limiting score, L, and the level of occupational origin, O. This equation simply relates differences in occupation scores at two points in time to the maximum possible distance upward or downward from some particular origin.

RMS was defined operationally for this study as the difference between occupation scores for 1970 and 1965 relative to the difference between occupation score for 1965 and the maximum possible change in scores. The general equation is made specific by

$$RMS = \frac{OCC70 - OCC65}{L - OCC\ 65}$$

where OCC70 and OCC65 represent occupation scores for 1970 and 1965. The value of the limit, L, in the denominator represents the upper and lower limits on a given scale of occupation scores, and the occupation scores constructed for this study have a maximum of .99 and a low of zero. Hence, for upwardly mobile workers RMS is calculated by

$$RMS = \frac{OCC70 - OCC65}{.99 - OCC65}$$

and for downwardly mobile workers by

$$RMS = \frac{OCC70 - OCC65}{O - OCC65}$$

This means of measuring distance and direction of occupational mobility as mentioned satisfies the established criteria for a suitable measure of occupational mobility. RMS will be positive if movement is upward and

negative if it is downward. The index can attain values ranging from +1.00 to -1.00. Identical values of RMS will result whenever workers move the same fraction of the distance from their respective origins toward the maximum possible distance. For those who move to the upper limit of .99, RMS will be +1.00 regardless of level of occupational origin. Similarly, those who drop to an occupation score of zero at their destination will have an RMS of -1.00. For those who move the same fraction of the maximum possible distance but less than the maximum distance--either upward or downward--RMS values will be equivalent. For workers who move half of the possible distance, for example, RMS will be .50 for any particular level of occupational origin. Finally, an index value of .50 represents twice the distance of an index value of .25.

Strong arguments against direct measures of occupational mobility have been made (Blau and Duncan, 1967; Hawkes, 1972; Blalock, 1966). In essence the argument is that, for analysis of causes and consequences of mobility, it is simply incorrect to use a mobility score as a variable in straightforward statistical analysis. Other than for purely descriptive purposes, the subtraction of one status score from another is not an appropriate way to measure mobility. Since determinants of an occupational origin status may differ from those of a destination status, mobility is regarded as not causally homogeneous. Statistical manipulation of a mobility score, therefore, runs the risk of confusing cause with effect. The solution to these difficulties in most previous studies has been to treat a destination occupation score as dependent on an origin score.

The rationale for developing a direct measure of occupational mobility begins with the notion that mobility is a distinct phenomenon characterized by a number of identifiable components. The components or properties of mobility are the object of measurement attention, rather than mobility per se. Despite a general awareness that occupational mobility can be distinguished by such dimensions as direction and distance, rarely has there been an effort to specifically identify these dimensions for measurement purposes.

DISSIMILARITY INDEX

The dissimilarity index, D, provides a single numerical value for making comparisons between pairs of groups (Duncan and Duncan, 1955). Historically, D has been used primarily to measure residential segregation, but recently has come to be employed for such questions as occupational

discrimination. In essence, D shows the proportion of one group that would have to be shifted to another group in order to attain equal distributions. If, for example, there is a D of .40 between the occupational distributions of Mexican and white men, this would mean that 40% of the Mexican men would need to be shifted into predominantly white male occupations in order to attain equal distributions.

The procedure for the calculation of the D-index is simple and straightforward. D is half the sum of the absolute differences in the proportionate distribution of two groups. Graphically, D can be interpreted as the maximum distance between the diagonal and a "discrimination curve." The formula for calculating D is:

$$D = 1/2 \sum_{i}^{k} \left| x_i - y_i \right|$$

where the summation is over all k categories, and x_i and y_i are the proportions in category i. In male-female comparisons, for example, x_i would represent the proportion of women in category i and y_i the proportion of men in the same i category.

The dissimilarity index is a measure of the unevenness of two distributions and, therefore, does not reflect other aspects of differences between groups. Similar D-values can be obtained, for example, where clusters in specific occupational categories are very different. Consequently, it is important to examine the distributions themselves as a means of interpreting the D-values. The D-index clearly indicates the degree of difference in a pair of distributions, but interpretation of the meaning of an observed difference is dependent on other considerations. The number of categories in a distribution is one influence on the magnitude of the dissimilarity index. In general, the fewer the number of categories, the lower the D-value. Whether some particular D-index measures discrimination or merely inequality in distributions is a question which must be approached with caution. In this study, the general criterion for determining whether discrimination against minorities exists is the principle of "inequalities among equals." In an operational sense this means, for example, that persons with similar levels of educational attainment are equally well qualified for employment and that observed differences, therefore, must be attributed to other factors, including the possibility of discrimination based on "minority" characteristics. There are real difficulties of course, in controlling simultaneously for all of the factors relevant to being qualified for achievement in the labor market. As a result, there is always some doubt as to whether persons are "equally well qualified."

APPENDIX B

OCCUPATION SCORES AND FREQUENCIES

	SCORES	JAPANESE	CHINESE	FILIPINO	KOREAN	WHITES
PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS						
ACCOUNTANTS	739	234	157	131	29	14278
ARCHITECTS	888	33	42	14	2	1116
COMPUTER SPECIALISTS	820	76	106	20	12	4303
AERONAUTIC/ASTRONAUTIC ENG.	926	28	33	8	0	1313
CHEMICAL ENGINEERS	965	7	29	9	4	1026
CIVIL ENGINEERS	879	78	128	28	5	3554
ELECTRICAL/ELECTRONIC ENG.	889	114	152	26	16	5556
INDUSTRIAL ENGINEERS	833	21	11	11	1	3304
MECHANICAL ENGINEERS	872	50	62	34	6	3672
SALES ENGINEERS	894	6	3	0	0	1223
OTHER ENGINEERS	831	46	93	14	9	4259
FARM/HOME MANAGEMENT ADVISORS	647	5	1	1	0	1284
LAWYERS AND JUDGES	976	29	20	6	5	5508
LIBRARIANS/ARCHIVIST/CURATORS	711	37	66	8	10	2441
MATHEMATICAL SPECIALISTS	768	12	18	4	2	723
LIFE AND PHYSICAL SCIENTISTS	862	116	152	62	23	3991
OPERATIONS/SYSTEMS RESEARCHERS	779	13	10	3	4	1567
PERSONNEL/LABOR RELATIONS WKRS	702	61	25	14	6	6076
DENTISTS	989	53	24	6	3	1759
PHARMACISTS	911	5	32	11	4	2137
PHYSICIANS, MEDICAL/OSTEOPATH	978	80	147	332	117	4966
OTHER RELATED PRACTITIONERS	933	14	6	2	1	1089
NURSES, DIETITIANS, THERAPIST	477	233	135	438	65	23561
HEALTH TECHNOLOGIST/TECHN.	534	39	100	111	20	5420
RELIGIOUS WORKERS	745	33	11	4	7	4351
SOCIAL SCIENTISTS	885	29	26	11	6	1990
SOCIAL AND RECREATION WORKERS	716	68	43	16	9	4879
TEACHERS, COLLEGE/UNIVERSITY	900	121	220	25	37	8029
TEACHERS, ELEM. KINDERGARTEN	738	409	174	103	23	35574
SECONDARY SCHOOL TEACHERS	848	180	85	38	17	19947
OTHER TEACHERS	507	57	37	16	6	4140
ENGINEERING/SCIENCE TECH.	640	104	66	54	7	6569

ELECTRIC/ELECTRONIC ENG. TECH.	627	63	32	17	7	2953
OTHER ENG./SCIENCE TECH.	599	65	49	50	11	5766
AIRPLANE PILOTS	784	4	0	0	0	1104
OTH. TECH. EX. HEALTH/ENG/SCI	565	29	10	12	2	2083
VOCATIONAL/EDUCATIONAL CNSLRS	890	23	7	3	3	1686
ACTORS AND DANCERS	415	3	7	8	1	513
AUTHORS, EDITORS AND REPORTERS	738	35	18	11	7	3756
OTHER WRITERS/ART./ENT.	598	136	135	51	28	11468
RESEARCH WORKERS, NOT SPEC.	788	57	90	14	14	1320
PROF./TECH./KINDRED WKRS-ALLOC	569	125	64	69	30	10513

MANAGERS AND ADMINISTRATORS, EXCEPT FARM

MGRS/ADM, PUBLIC ADMIN.	642	89	40	27	7	7940
OTHER MANAGERS/ADMINISTRATORS	590	113	45	20	17	13669
BANK OFFICERS/FINANCIAL MANAG.	743	86	45	15	5	6438
BUYERS/PURCH. AGNTS/SALES MNGR	652	200	53	16	5	17708
REST./CAFE./BAR MANAGERS	375	83	235	23	9	7134
SCHOOL ADMINISTRATORS	914	30	15	7	1	3820
MANAGERS/ADMINISTRATORS, NEC	605	694	559	63	41	72400
MNGRS/ADMIN, EXC. FARM ALLOC.	481	32	22	17	14	4828

SALES WORKERS

ADVERT. AGENTS AND SALESMEN	67	9	4	5	0	1407
DEMONSTRTRS/HUCKSTERS/PEDDLERS	90	13	10	9	0	5219
INSUR. AGNTS/BRKRS/UNDRWRTRS	664	63	37	18	5	9442
NEWSBOYS	247	4	3	0	0	669
REAL ESTATE AGENTS AND BROKERS	535	34	24	11	0	5722
SALESMEN AND SALES CLERKS, NEC	365	0	0	0	0	0
SALES REP, MNFCTRNG INDUSTRIES	682	56	14	6	2	8647
SALES REPS., WHOLESALE TRADE	622	134	40	19	10	12978
SALES CLERKS, RETAIL TRADE	167	515	267	133	27	55883
SALESMEN, RETAIL TRADE	472	59	17	11	3	9538
SALESMEN OF SERVICES/CONSTR.	447	46	16	8	4	5101
OTHER SALES WORKERS	797	24	22	0	1	2120
SALES WORKERS--ALLOCATED	265	60	35	31	5	7215

CLERICAL AND KINDRED WORKERS

BANK TELLERS	222	59	47	29	4	6479
BILLING CLERKS	233	24	12	15	3	2715
BOOKKEEPERS	274	425	219	164	19	39754

CASHIERS	109	212	240	53	24	19759
CLERICAL SUPERVISORS, N.E.C.	570	41	14	15	3	2317
COUNTER CLERKS, EXCEPT FOOD	190	53	26	20	0	5207
ENUMERATORS AND INTERVIEWERS	197	11	3	3	0	2070
ESTIMATORS/INVESTIGTRS, NEC	510	51	23	11	4	6060
EXPEDITERS/PRODUCTION CONTR.	526	31	15	15	2	4171
FILE CLERKS	214	99	55	102	6	8480
INSUR. ADJST./EXAM./INVSTGTRS	691	12	11	10	0	2023
LIBRARY ATTENDANTS/ASSIST.	379	35	36	6	6	1697
MAIL CARRIERS AND HANDLERS	441	56	40	28	3	7017
BKKPNG/BILLING MACH. OPS.	200	17	8	14	1	1824
COMPUTER/PERIPHERAL EQ. OPS.	531	38	26	18	4	2040
KEY PUNCH OPERATORS	236	67	90	59	18	6888
OTHER OFFICE MACHINE OPERATORS	227	23	17	17	3	2480
PAYROLL AND TIMEKEEPING CLERKS	352	47	17	22	0	3882
POSTAL CLERKS	465	75	58	48	0	5202
RECEPTIONISTS	193	82	16	25	6	8262
SECRETARIES	320	651	243	178	34	74920
SHIPPING AND RECEIVING CLERKS	363	52	29	26	7	7511
STATISTICAL CLERKS	376	50	34	30	4	5563
STENOGRAPHERS	344	99	20	10	1	3411
STOCK CLERKS AND STOREKEEPERS	363	106	41	71	4	8401
TEACHER AIDES, EXC. SCHL MNTRS	116	35	6	9	0	2171
TELEPHONE OPERATORS	203	35	16	22	3	10354
TICKET/STATION/EXPRESS AGENTS	569	51	23	12	4	2089
TYPISTS	215	379	183	157	26	25612
OTHER CLERICAL WORKERS	395	38	20	22	3	6110
MISC. CLERICAL WRKRS.	339	114	51	50	7	10853
NOT SPECIFIED CLERICAL WORKERS	264	77	121	92	10	20064
CLERICAL/KINDRED WRKS - ALLOC.	248	[illegible]	114	78	27	16793

CRAFTSMEN AND KINDRED WORKERS

BAKERS	[illegible]	30	22	12	2	2089
MASONS AND TILESETTERS	[illegible]	45	1	15	0	3650
BULLDOZER OPERATORS	[illegible]	6	0	22	0	1826
CABINETMAKERS	354	14	2	5	1	1305
CARPENTERS	368	257	26	74	9	18700
PLASTER/CEMENT FINISHERS	349	12	2	6	0	1526
COMPOSITORS AND TYPESETTERS	446	28	14	5	1	3057
CRANEMEN/DERRICKMEN/HOISTMEN	438	8	5	16	2	2973
DECORATORS/WINDOW DRESSERS	301	33	4	1	4	1696
ELECTRICIANS	491	83	28	29	4	9497
ELEC. POWER LINEMEN/CABLEMEN	489	9	1	2	0	2089

EXCV/GRDNG/RD MACH OP EX BLDZR	392	15	3	11	0	4991
FOREMEN, N.E.C.	518	244	69	62	4	32769
JOB/DIE SETTER, MACHINIST	460	56	22	29	10	9296
OTHER METAL CRAFTSMEN	417	14	2	11	1	4128
LOCOMOTIVE ENG./FIREMEN	504	3	1	1	0	1388
AIR COND./HEATING/REFRIG.	457	20	5	3	1	2373
AIRCRAFT	521	48	25	23	2	2766
MECHANICS AND REPAIRMEN, AUTO.	394	223	36	49	6	17139
HEAVY EQUIP. MECH. INCL DIESEL	451	80	15	32	8	11563
HSHLD APPL/ACCES INSTLL/MECH.	428	20	4	7	0	2392
RADIO AND TELEVISION	452	47	30	7	3	2524
OTHER MECHANICS AND REPAIRMEN	462	60	21	27	6	3440
MILLWRIGHTS	486	2	1	0	0	1738
PAINTRS, CONST/MAINT/PPR HNGRS	312	89	10	28	2	7222
PLUMBERS AND PIPE FITTRS	452	57	14	26	0	7717
STATIONARY ENG/POWER PLT OP	468	13	4	14	2	4086
PRESSMEN/PLATE PRNTRS, PRINTNG	444	24	12	7	1	2994
SHEETMETAL WRKRS/TINSMITHS	462	19	6	10	0	3144
APPAREL CRAFTSMEN/UPHOLSTERERS	278	33	25	14	3	2483
LINEMEN/SERVICEMEN - TEL/POWER	518	54	19	15	0	5759
TOOL AND DIE MAKERS	511	17	7	7	1	4116
OTHER CRAFTSMEN	376	161	54	78	13	16609
CRAFT APPRENTICES	481	19	5	6	3	2024
CRAFTSMEN/KINDRED WRKRS, ALLOC	369	110	79	55	14	11968

OPERATIVES, EXCEPT TRANSPORT

ASSEMBLERS	225	102	46	90	29	21790
BOTTLING/CANNING OPERATIVES	171	22	27	25	3	1267
CHECKERS/EXAM./INSPECT., MANF.	278	61	28	30	16	16296
CLOTHING IRONERS AND PRESSERS	51	68	137	21	5	3033
CUTTING OPERATIVES, N.E.C.	253	19	13	5	2	3578
DRESSMKRS/SEAMSTRS, EXC FACTRY	73	146	36	23	9	2274
FILERS/POLISHERS/SANDERS/BUFFR	277	9	3	6	1	2326
GARAGE WRKS/GAS STAT. ATTNDNTS	270	40	17	17	3	5548
PRODUCE GRDRS/PCKRS EX FAC/FRM	72	11	13	14	0	1169
GRADERS/SORTERS, MNFG.	18	35	6	13	1	885
LAUNDRY/DRY CLNG OPERAT. NEC	83	47	214	45	4	3151
MEAT CUTTERS AND BUTCHERS	364	51	105	34	1	4971
MINE OPERATIVES, N.E.C.	363	4	1	2	0	3702
PACKERS/WRPPRS, EX MEAT/PRODUCE	128	141	65	80	23	12127
PAINTERS, MANUFACTURED ARTCLS	311	20	1	13	1	2167
PRECISION MACHINE OPERATIVES	407	26	7	11	7	8559
PUNCH/STAMPING PRESS OPERATVES	281	16	5	8	1	3573

PUNCH/STAMPING PRESS OPERATVES	281	16	5	8	1	3573
SAWYERS	218	5	3	4	0	1996
SEWERS AND STITCHERS	29	396	706	89	52	22375
STATIONARY FIREMEN	376	9	2	15	1	2009
TEXTILE OPERATIVES	140	17	7	2	8	9671
WELDERS AND FLAME-CUTTERS	399	58	15	50	6	10673
OTHER METAL WRKNG OPERATIVES	390	3	1	2	1	773
OTHER SPECIFIED OPERATIVES	262	235	103	180	23	28118
MACHINE OPER., MISC. SPECIFIED	277	107	35	81	14	21382
MACHINE OPER., NOT SPECIFIED	297	40	22	37	11	10510

TRANSPORT EQUIPMENT OPERATIVES

NOT SPECIFIED OPERATIVES	270	35	18	21	6	6254
OPERATIVES, EX TRANSPRT, ALLOC	194	147	122	105	36	13361
BUSDRIVERS	239	11	6	7	0	4329
DELIVERYMEN AND ROUTEMEN	387	66	23	27	1	10526
FORKLIFT/TOW MOTOR OPERATIVES	391	15	4	15	1	3570
RAILROAD BRAKEMEN/SWITCHMEN	494	2	1	3	0	2015
TAXICAB DRIVERS/CHAUFFERS	282	26	9	32	3	2543
TRUCK DRIVERS	369	103	19	100	4	26177
OTHER TRANSPORT EQUIP OPER	339	3	5	9	3	782
TRANSPORT EQUIP OPER, ALLOC	316	19	32	20	6	3020

LABORERS, EXCEPT FARM

CONSTR LABOR, EX CRPNTRS HLPRS	282	38	14	23	0	9938
FRIGHT AND MATERIAL HANDLERS	312	29	14	30	2	8997
GARBAGE COLLECTORS	252	5	1	2	0	849
GARDENERS/GROUNDSKPRS, EX FARM	242	439	9	90	2	4571
LUMBERMEN/RAFTSMEN/WOODCHPPPS	183	0	2	0	1	1651
STOCKHANDLERS	259	90	66	28	7	7167
VEHICLE WASHERS/EQUIP CLEANERS	237	6	6	9	0	1497
WAREHOUSEMEN, N.E.C.	417	39	8	38	0	1944
OTHER SPECIFIED LABORER	266	25	10	36	2	3067
MISCELLANEOUS LABORERS	278	18	6	12	1	3416
NOT SPECIFIED LABORERS	231	32	12	50	2	6799
LABORERS, EX. FARM, ALLOC	255	67	47	48	21	4016

FARMERS AND FARM MANAGERS

FARMERS /OWNERS AND TENANTS/	272	240	20	34	2	26685
FARM MANAGERS	409	44	5	6	0	1181
FARMERS/FARM MANAGERS, ALLOC	211	13	1	7	2	1555

FARM LABORERS AND FARM FOREMEN

FARM LABORERS, WAGE WORKERS	89	203	20	543	6	11779
FARM LABOR, UNPD FAMILY WRKR	69	43	3	3	0	1359
OTHER FARM LABORERS/FOREMEN	339	39	5	12	2	646
FARM LABORERS/FOREMEN, ALLOC	113	24	9	23	2	1238

SERVICE WORKERS INCLUDING PRIVATE HOUSEHOLD

CLEANING SERVICE WORKERS	169	301	110	379	32	27886
BARTENDERS	252	28	42	29	6	4157
COOKS, EXCEPT PRIVATE HOUSEHLD	96	240	875	237	12	16017
WAITERS/FOOD COUNTER WORKERS	44	457	491	188	101	33578
OTHER FOOD SERVICE WORKERS	60	157	260	215	11	8944
NURSING AIDES/ORDERLIES/ATTND.	96	61	20	116	20	14293
PRACTICAL NURSES	216	32	3	37	2	4827
OTHER HEALTH SERVICE WORKERS	103	53	17	54	6	5026
BARBERS	324	40	12	55	4	2495
HAIRDRESSERS/COSMETOLOGISTS	115	195	39	45	28	12578
OTHER PERSONAL SERVICE WORKERS	211	153	63	84	12	9914
FIREMEN, FIRE PROTECTION	523	20	4	5	0	3572
GUARDS AND WATCHMEN	309	20	4	27	3	7107
POLICEMEN AND DETECTIVES	549	23	17	15	6	7514
SERVC WRKRS EX PRVT HSHLD, ALLC	146	236	170	111	31	12388
PRIVATE HOUSEHOLD WORKERS	5	278	84	77	23	12570
PRIVATE HSHLD WRKRS, ALLOC	0	0	0	0	0	0

NOTE:

This list of 203 occupational categories resulted from combining a number of occupations in the census detailed list of occupations. For reasons of space, abbreviations have been used. N.E.C., for example, means not elsewhere classified. The detailed census list can be consulted for further clarification (See, for example, U.S. Bureau of the Census, Public Use Samples of Basic Records From the 1970 Census, pp. 100-110).

Decimals have been omitted in this list of occupation scores. The scores shown in the first column are all to three decimal points, e.g., 739 = .739 for accountants and 51 = .051 for clothing ironers and pressers.

The occupation scores for 1970 are based on all employed persons in the PUS records, although this listing shows only the frequencies for those workers covered in this report.

Workers whose occupations were allocated in each of the major occupation groups were treated for purposes of constructing occupation scores as if they were a specific occupation groups.

The frequencies for each occupational category are based on the PUS files and include both males and females. In this printout, zero frequencies appear incorrectly in two categories, salesmen and sales clerks, N.E.C., and private household workers, allocated. Actual sample counts were used in the construction of scores.

APPENDIX C

PUBLIC USE SAMPLES

The statistics in this report are estimates derived from the Public Use Samples of basic records from the 1970 census. The reliability of specific estimates is influenced by two types of errors--sampling and nonsampling. Sampling errors occur because observations are based on a sample rather than on an entire population. Nonsampling errors result from a variety of conditions: incomplete information about all individuals in the sample, definitional difficulties, differences in interpretations of questions, inability or unwillingness to provide correct information, and mistakes in recording or coding the data. Nonsampling errors also occur in complete census enumerations.

Errors attributable to sampling were not estimated in this study, primarily for two reasons. First, samples were sufficiently large and relatively homogeneous to reduce the need for making error estimates. Second, detailed and comprehensive error estimates involve a major task the costs of which were regarded as unwarranted for this study. It is also the case that the customary estimates of error do not account for nonsampling errors. In lieu of error estimates and tests of differences, estimates and differences between estimates were judgmental. Where differences are relatively large and patterns fairly consistent, it was felt that error estimates and tests were unnecessary. When intergroup differences are relatively small, there is a risk of misinterpreting the sample estimates.

Six 1/100 Public Use Samples were constructed from the 1970 census of population and housing: three from the 15% questionnaire samples and three from the 5% questionnaire samples. The three samples for each of the questionnaires are the State, County Group and Neighborhood Characteristics samples. Each of the samples is self-weighting; that is, each person or household in a 1% sample can be assigned a weight of 100, or a weight of about 16.7 in a 6% sample.

The Bureau of the Census has published a number of reports treating various aspects of samples, and readers are referred to such publications as the following for more detailed discussions of sampling and nonsampling errors and descriptions of the Public Use Samples.

Public Use Samples of Basic Records from the 1970 Census: Description and Technical Documentation. Washington, D.C., 1972.

Standards for Discussion and Presentation of Errors in Data, Technical Paper No. 32. Washington, D.C., 1974.

Sampling Applications of the 1970 Census Publications, Maps, and Public Use Summary Files, Technical Paper No. 27.

Coding Performance in the 1970 Census, Evaluation and Research Program PHC(E)-8, 1974.

Estimates of Coverage by Sex, Race and Age: A Demographic Analysis, Evaluation and Research Program PHC(E)-4, 1973.

APPENDIX D

FURTHER RESEARCH

A keener awareness of the need to press further with investigations of minorities in the labor market is one of the consequences of this study. Despite the detailed information in this report, there are many instances in which further probing could provide even more useful information. There are also many aspects of participation and achievement in the labor market which were either not included or were touched upon only lightly. As a result there are many questions yet to be answered and this research is useful as a means of identifying topics and questions in need of further investigation.

In specifying extensions of this line of research, only information that can be derived from census data is considered. This does not imply that other sources should not be utilized, but rather it demonstrates the potential richness of information from data of this kind. There are important kinds of questions which, of course, can not be handled with census data. Attitudinal, motivational and personality information is entirely lacking in census-type data. So too is information lacking on employment practices of business firms, the activities of labor unions or the operation of specific governmental programs. Census data for individuals tend to be cross-sectional which severely limits analysis of changes and trends except on a decennial basis. Studies of status achievement and discrimination need to employ a variety of approaches and kinds of information. Nevertheless, census data have not yet been fully exploited, and from this investigation alone a number of worthwhile extensions on research are quite apparent.

Further research may be grouped roughly into two not mutually exclusive categories: research which probes more intensively into topics covered in this investigation and research which extends the present investigation by examining various aspects of achievement and discrimination not covered in this investigation.

First, there are a number of specific types of cases about which further information is needed. Occupational mobility was distinguished on the basis of direction of movement, and there is a strong suspicion that major differences exist between workers who move up and those who move down the occupational scale. Nonmobile workers may differ from both kinds of movers. A much more intensive analysis of similarities and differences by the direction of occupational mobility is needed in order to determine such things as whether differences in education, vocational training, color and sex account for movement either up or down.

Quite different are questions about those who have never worked. Are minorities more likely than whites to have never been employed, even among those with similar qualifications for participation in the labor market? Women, of course, more often than men have never entered the job market, but is this because they lack the necessary qualifications? College graduates do comparatively well in the labor market, and with the 1970 census data it is possible to determine what has happened by 1970 to students in college in 1965. How many were employed in 1970, in what kinds of jobs and with what level of earnings? Since all who were college students in 1965 and graduated by 1970 can be identified, it would be instructive to determine whether color minorities and women do as well as white males or not.

Immigrants are a very special type and the circumstances surrounding immigration from particular countries and the time of immigration may have much to do with participation of the foreign born in the American labor market. The overall indications in this study showed rather slight and inconsistent differences between the foreign born and natives. Despite this there is a need to push further to ascertain whether differences in age at the time of immigration, differences in the dates of immigration and differences in general economic and political conditions at the time of immigration affect the immigrant's participation in the labor market.

Part-time workers are another distinctive type, and it is important to ascertain more fully their characteristics. Women are more likely than men to work less than a full year. Is this primarily because of family responsibilities or is it because women are concentrated in such occupations as teaching which normally involve less than 52 weeks of work?

Persons who have had vocational training are expected to benefit from their training and generally this appears to be the case. In reviewing the participation and achievements of former trainees, however, their performance should be examined more intensively to determine whether other factors may help explain their apparent success. Their level of educational attainment and disability status, for example, should be controlled before determining the effects of vocational training. For women, the presence of young children at home may offset the gains of vocational training.

This report concentrates on persons employed in 1970 with the result that recruits and those who left the labor force between 1965 and 1970 were neglected. As a consequence of this, questions concerning inequalities and discrimination for recruits and dropouts remain unanswered. Did minorities who entered the labor force between 1965 and 1970 obtain jobs and earnings at the same levels as the majority? Did the minority dropout--who left the labor market between 1965 and 1970--leave at the same rate as majority workers and did minority workers leave from the same occupational levels as majority workers or not? Is it the lack of education and vocational training that induces departure from the job market?

Examination of differences in the effects of the changing occupational structure--decreases in the numbers employed in an occupation--was confined to persons employed in both 1965 and 1970. While this procedure simplified and made the analysis more manageable, it also effectively removed from consideration the effects of structural changes on labor turnover. Therefore, a number of questions remain to be answered. Are minorities more likely than the majority to leave the labor force because of structural changes? What effect does structural change have on drawing recruits into the job market and does this vary between men and women and between color groups? Do minority workers join the ranks of the unemployed or do they more often leave the labor force entirely when forced out by changes in the occupational structure?

Occupational achievement, mobility and earnings are affected by the type of industry. Major industry groups were employed in this study, but it should be informative to reexamine the data using a more detailed industry classification. While it may not be feasible to work with the most detailed industry classification possible, specific industries with relatively large numbers of workers can be singled out for special analysis. Manufacturing industries, for example, account for a substantial part of total employment and differences between employment in durable and nondurable manufacturing may easily be examined. Occupational structures vary, of course, by type of industry, and this suggests extending research to evaluate discrimination within an industry while holding constant the occupational structure, or alternatively, evaluating discrimination within an occupational group while holding industry constant.

The degree of segregation in an industry or occupation may help explain differences in labor force participation, occupational achievement, mobility and earnings. No such measures were used in this study, but it is strongly suspected that some industries and occupations are more segregated than others and that such segregation influences the dependent variables (employment, achievement, mobility and earnings of minorities). Industrial and occupational segregation, as structural factors, may be measured by merely taking the percentage of whites, or white males employed. Individual workers can then be assigned a "segregation score" in accordance with their industry and occupational groups.

Differences in the location of workers result in differences in their earnings and probably in their level of occupational achievement. Part of the observed differences between workers are undoubtedly attributable to regional factors and whether they lived and worked in a metropolitan area or not. In the day-to-day routine, inequality and discrimination take place in local areas and the extent to which local variations occur is obscured at the national level. Minorities, of course, are unevenly distributed across the country. Hence, while it is informative to establish benchmarks at the national level, in both theoretical and program terms it is important to also know about variations by regions and localities.

Education, occupation and earnings represent different but interrelated components of socioeconomic status and one of the questions about achievement pertains to the degree of consistency among the components of status. An unexplored area of investigation is the status consistency of minorities. Status consistency (or inconsistency) can be examined for individuals, where a central question is whether the components of status for a person are basically consistent (i.e., all about equal). For some ethnic minorities and also for women, it is suspected that a high degree of inconsistency exists. Inconsistency results, for example, when a worker has a high level of educational attainment and low levels of occupational achievement and earnings. Differences in status consistency between individuals also can be examined. To what extent are the statuses of spouses consistent and does the nature and degree of status consistency influence the achievement levels of either or both spouses? Is status inconsistency greater for some ethnic groups than others, and, if so, does this relate to discrimination?

There have been many clues and suggestions that labor force participation and status achievement are related to the family life cycle, especially for women. So far there has been almost no systematic investigation of this kind of relationship. Factors such as age, marital status and the presence of children are related to employment and status achievement. There are indications, however, that family stage is a more powerful explanatory variable than age or marital status alone. Therefore, there is good reason to control for the influence of family stage in evaluating intergroup differences in status achievement.

Studies are underway to determine the nature of relationships between migration--residential change--and labor force participation, occupational achievement and earnings. Some of these are concerned with the effects of migration on the employment and occupational achievement of women. This line of investigation should be extended to include color and ethnic minorities as well. The 1970 census data were not planned or organized in a way which would permit the fullest exploitation of interrelationships between migration and occupational mobility. Still it is possible to push forward in this direction with a special emphasis on ethnic minorities and women.

The "quality of life" or level of living achieved by workers is presumed to be higher for those with higher levels of educational attainment and higher earnings. This has not yet been demonstrated. One way of making an inroad is to construct a level of living index as a means for determining just how much it is influenced by earnings, level of occupational achievement and education. Levels of living may vary among ethnic groups and such variations may be partly a consequence of inequalities and discrimination in the labor market.

Trends in inequalities and discrimination are generally not well described. Nationally, educational levels are rising, workers are

shifting away from farm occupations and lower blue-collar to white-collar occupations, and earnings are increasing. Whether each of the several color minorities and women are changing in the same ways is not yet clear. Comparisons based on 1960 and 1970 data would provide information about such trends, and the Current Population Survey provides annual data on a relatively small national sample which permits the construction of barometers to measure changes in discrimination.

In sum, there are a number of possible extensions and refinements that might be based on the present study. Although this research has gone beyond previous studies by covering more aspects of the labor market and by including groups such as Koreans for whom there has been no detailed information in the past, there are quite obviously a number of additional questions that require answers. The foregoing remarks about future research are extremely sketchy, but hopefully they will help provide the necessary impetus to move forward.

REFERENCES

Blalock, H.M., Jr.
1966 The Identification Problem and Theory Building: The Case of Status Inconsistency, American Sociological Review 31 (February):52-61.

1967 Toward a Theory of Minority-Group Relations. New York: Wiley.

Blau, Peter M. and O. D. Duncan
1967 The American Occupational Structure. New York: Wiley.

Bogue, Donald J.
1969 Principles of Demography. New York: John Wiley and Sons.

Boyd, Monica
1971 Oriental Immigration: The Experience of the Chinese, Japanese, and Filipino Population in the United States, International Migration Review V(Spring):48-61.

Cain, Glen G.
1974 Review Essay: Socioeconomic Background and Achievement by Otis D. Duncan, David L. Featherman, and Beverly Duncan, American Journal of Sociology, 79(May):1497-1509.

Counts, George S.
1925 The Social Status of Occupations: A Problem in Vocational Guidance, School Review 33(January):16-27.

Duncan, Otis D.
1961 A Socioeconomic Index for All Occupations. In A.J. Reiss et al, Occupations and Social Status. New York: Free Press.

1968 Patterns of Occupational Mobility Among Negro Men, Demography 5:11-22.

Duncan, Otis D. and Beverly Duncan
1955 A Methodological Analysis of Segregation Indexes, American Sociological Review, 20(April):210-217.

Duncan, Otis D., David L. Featherman and Beverly Duncan
1972 Socioeconomic Background and Achievement. New York: Seminar Press.

Edwards, Alba M.
1938 A Social-Economic Grouping of the Gainful Workers of the United States, 1930. Washington, D.C.: U.S. Government Printing Office.

Hauser, Robert M. and David L. Featherman
1974a White-Nonwhite Differentials in Occupational Mobility Among Men in the United States, 1962-1972, Demography 11(May): 247-265.

1974b Socioeconomic Achievements of U.S. Men, 1962 to 1972, Science 185(July):325-331.

Hawkes, Roland K.
1972 Some Methodological Problems in Explaining Social Mobility, American Sociological Review, 37(June):294-300.

Jencks, Christopher
1972 Inequality: A Reassessment of the Effect of Family and Schooling. New York: Basic Books.

Kim, Hyung-Chan
1974 Some Aspects of Social Demography of Korean Americans, International Migration Review, 8(Spring):23-42.

Kitano, Harry H.L.
1969 Japanese Americans: The Evolution of a Subculture. Englewood Cliffs, New Jersey: Prentice-Hall.

Lyman, Stanford
1974 Chinese Americans. New York: Random House.

National Opinion Research Center
1947 National Opinion on Occupations: Final Report of a Special Opinion Survey Among Americans 14 and Over. Denver: University of Denver (March).

North, David S.
1974 Immigrants and the American Labor Market, Manpower Research Monograph No. 31. U.S. Department of Labor.

Petersen, William
1971 Japanese Americans. New York: Random House.

Schmid, Calvin F. and Charles E. Nobbe
1965 Socioeconomic Differentials Among Nonwhite Races, American Sociological Review, XXX. 909-22.

Schwartz, Audrey James
1971 "The Culturally Advantaged: A Study of Japanese-American Pupils," Sociology and Social Research, 55(April):341-353.

Smith, Mapheus
1943 An Empirical Scale of Prestige Status of Occupations, American Sociological Review 7(April):185-192.

Sweet, James A.
1974 Differentials in the Rate of Fertility Decline: 1960-1970, Family Planning Perspectives 6(Spring):102-107.

Tan, Mely Giok-Lan
1973 The Chinese in the United States: Social Mobility and Assimilation. Taipei: The Orient Cultural Service.

Uhlenberg, Peter
1972 Demographic Correlates of Group Achievement: Contrasting Patterns of Mexican-Americans and Japanese-Americans, Demography 9(February):119-128.

U.S. Bureau of the Census
1960 Historical Statistics of the United States, Colonial Times to 1957, U.S. Government Printing Office, Washington, D.C.

1963 Methodology and Scores of Socioeconomic Status. U.S. Bureau of the Census, Working Paper No. 15.

1973a Census of the Population: 1970. Detailed Characteristics, Final Report PC(1)-D1, United States Summary. U.S. Government Printing Office, Washington, D.C.

1973b Census of the Population: 1970. Subject Reports, PC(2)-1G, Japanese, Chinese and Filipinos in the United States. U.S. Government Printing Office, Washington, D.C.

U.S. Congress, House of Representatives, Committee on Education and Labor, Subcommittee on Equal Opportunities
1974 The New Americans Education and Employment Assistance Act, Hearing on H.R. 9895, 93rd Congress, Second session, (November).

U.S. Department of Commerce, Bureau of the Census
1967 Statistical Abstract of the United States, U.S. Government Printing Office, Washington, D.C.

1972 Statistical Abstract of the United States, U.S. Government Printing Office, Washington, D.C.

U.S. Immigration and Naturalization Service
1973 INS Annual Report, 1973, Department of Justice, Washington, D.C.

Varon, Barbara F.
1967 The Japanese Americans: Comparative Occupational Status, 1960 and 1950, Demography 5:809-819.

Wilber, George L. and Robert J. Hagan
1974 Alternative Sets of Occupation Scores from the 1970 PUS, Review of Public Data Use 2(October):40-44.

Yuan, D.Y.
1969 Division of Labor Between Native-Born and Foreign-Born Chinese in the United States: A Study of Their Traditional Employments, Phylon 30(Summer):160-169.