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A STUDY OF OCCUPATIONAL ACHIEVEMENT OF MIGRANTS TO KAOHSIUNG CITY, TAIWAN+

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I. INTRODUCTION

A. The Research Problem

Migration is a dynamic social process (Goldscheider, 1971: 48-50). It not only promotes one area's economic development but also is a life and progression (Lee, 1966: 54). Individuals can adjust their social system through migration. For instance, one can alter occupational opportunities through the migration process. However, since Ravenstein (1885, 1889) found his "laws of migration", the theory of migration can be categorized into a gravity model (Stouffer, 1940; Isard, 1960: 493-568) and differential migration (Jansen, 1970). One shortcoming of both theories is that they do not pay attention to individual-choice behavior. This study will try to analyze migrants' adjustment in an urban place of a developing country. We want to know how they adjust to an urban environment and its occupational structure, and social network institutions. More importantly, we also want to know the details of this adjustment process.

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B. The Objectives of the Study

This study examines determinants of occupational achievement of migrants to Kaohsiung, the largest city in the southern part of Taiwan. Based on the framework of contextual analysis, which explains individual behavior in its social and environmental context, this paper investigates the effects of structural and individual variables on the occupational achievement of subgroups of Mainlanders and Taiwanese by sex. Data were collected by Kao-chiao Hsieh, Professor of Sociology, at National Cheng-chi University in the summer of 1978. This study proposes that occupational achievement is a function of individual and household variables and individuals' information network structure in cityward migration. Our goals are: (1) to investigate educational attainment and information structure patterns among migrants; (2) to decide whether if, and to what extent, ethnicity and gender differences influence intragenerational occupational mobility among migrants; and (3) to determine which theoretical approach, i.e., status attainment or information, will have greater explanatory power for explaining occupational achievement among migrants.

C. Definition of Migration

Generally speaking, people moving from one place to another one is called migration. However, this concept is very vague. For example, are commuter students or workers migrants? Indeed, they move from one place to another every-day. But they do not change their permanent residence. If these people are regarded as migrants, then migration study might be more complex and difficult. To avoid this potential problem, in this paper, we define migration as a person or a group changing their residence from their original township to another one and changing their environment and social system. This definition is close to other definitions of migration (Bogue, 1959; Lee, 1966; Mangalam and Schwarzweller, 1975; Nam and Gustavus, 1976; Petersen, 1975). It not only includes population redistribution (Goldscheider, 1971: 66; Lee, 1966: 147) but also changes an individual's community relationship (Bogue, 1959: 499; Hawley, 1950: 327). More importantly, as Bogue emphasized: "in the process of changing his community of residence, the migrant tends simultaneously to change employers, friends, neighbors, parish mem-

bership and many other social economic ties." Under this definition, this change is a permanent movement and migrants must live in the destination at least six months. This definition includes both spatial and social change for migrants. It also allows us to exclude travellers, seasonal movers (see Speare, 1971) and movers within one township, all of which have little effect on one's enduring social environment. Thus the subjects in our sample must: (1) live in Kaohsiung at least six months before the date of our interview; and (2) move to Kaohsiung from another township but not move within districts of Kaohsiung because their community relationship does not change significantly.

D. Limitations of the Study

This project has some limitations. First, as we know, migrants are a highly selective group and have some differential characteristics compared to non-migrants (Chang, 1986). Also, it should be noted that our subjects are heads of household or their spouses. Therefore, these results can only apply to certain migrant groups. To generalize the findings to the broader population may not be valid.

Second, this is a case study confined to a metropolitan community—Kaohsiung City. The characteristics of these migrants may differ from other migrants (Chang, 1986) such as rural or other urban migrants. We should be careful when generalizing our findings to other areas.

Third, because we limit our sample to 1977 migrants into Kaohsiung city, it means that their length of residence is half to one and a half years. This may be too short a time to see the fuller adjustment to new conditions though we do demonstrate that our sample is similar to other surveys (Chang, 1986).

II. LITERATURE REVIEW AND HYPOTHESES

A. Theoretical Orientation

a. Human Capital/Status Attainment Theory

bershii Sociologists or economists of this school emphasize that individuals can achieve their occupational attainment through their ability. Most research deals with migrant and non-migrant (Blau and Duncan, 1967; Duncan et al., 1972; Greenwood, 1975: Lane, 1977) or native-born and foreign-born (Chiswick, 1978; 1982) with occupational achievement. More recently, research also pays attention to the mobility of women (Duncan and Perrucci, 1976; Rank and Voss, 1982) and age effect on occupational achievement and migration (Lane, 1977). It is the purpose in this section to relate these three variables to migration and occupational mobility.

1. Migratory Status

It is generally recognized that occupational mobility is associated with migration (Freedman and Hawley, 1949; Prehn, 1967; Scudder and Anderson, 1954). Lipset and Bendix (1959) have suggested that for the U.S., migration from rural to urban areas operates today as immigration of foreigners functioned in the past. However, before Blau and Duncan (1967) published the American Occupational Structure in 1967, empirical investigations into social stratification and mobility focused primarily on tabular analyses of occupational distributions. Blau and Duncan introduced a new approach to research on stratification, a causal model which linked occupational mobility to the life cycle of individuals. Among the conceptual elements were the representation of occupational differentiation as a status hierarchy, the assumption that intergenerational mobility can be expressed as a "basic model" involving causal linkages among five variables, and the demonstration of the utility of regression (path) analysis for estimating the parameters of such a model. The basic model can be expressed in Figure 1.

Blau and Duncan found that migrants tend to be superior in their social origins and background characteristics as compared to nonmigrants at both origin and destination point. 13. 13. 15 S

The main question addressed by Duncan and his associates in their study was "whether the occupational achievements of men are favorably or unfavorably influenced by the experience of migration" (1972:224). They identified two types of migrants: migrants with nonfarm backgrounds and those with farm backgrounds.

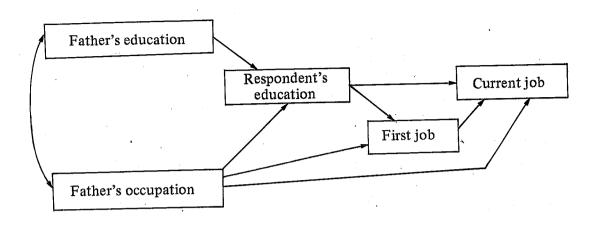


Figure 1: Blau's and Duncan's Path Model of the Process of Occupational Attainment

The general conclusions of this research were that migrants with farm backgrounds achieve higher status than those who do not migrate but consistently achieve lower occupational status than either migrants or non-migrants with non-farm backgrounds. A substantial part of the differential in occupational attainment is that migrants are favorably selected with respect to family background and education. These findings are consistent with the results of the earlier analysis of the same data by Blau and Duncan (1967).

Meanwhile, research on developing societies, mainly Latin American, shows the same pattern as for the U.S. Using data gathered in Argentina, Brazil, and Chile, Bock and Iutaka (1969) examined migratory status and occupational achievement. They concluded that rural migrants tended to be upwardly mobile in the urban areas, although they might not reach the occupational levels attained by urbanites. More importantly, however, they emphasized that education plays a greater role than other variables in determining social mobility especially for a younger population. Analyzing the Chilian study in Santiago, Raczynski (1972) found the same result. These conclusions confirm that migrants have a mobility disadvantage in Latin America's large cities. Raczynski also revealed that farm background is not a handicap to occupational mobility. This would suggest that investment in human

capital might raise migrants' occupational achievement (Becker, 1964; Sjaastad. 1962). Yet, he confirmed that an early farm occupation is a handicap over and above differences in social origin and education. Dealing with data collected in Monterrey, Mexico, Balan (1968) has shown that sons of farmers are handicapped in the city by their fathers' generally lower status but not necessarily by the farm occupational setting where they grew up. Gathering data in Mexico City and Ankara, Turkey, Moots (1976) found the same conclusion as Bock and Iutaka (1969) and Raczynski (1972). Using data from Seoul and Chouju, Korea, Koo and Barringer (1977) examined the effects of rural background on rural migrants' socioeconomic achievement in Korean society. Applying the Blau-Duncan basic model, they found, in general, rural migrants tend to obtain lower occupational and income status positions than either native urbanites or urban migrants. These status differences, however, seem to be due largely to rural migrants' educational inferiority to men of urban origins. However, rural migrants still have higher occupational status compared to their original groups. Given these consistent findings, we can conclude that the relationships between rural background and urban status achievements are basically constant across developed and developing societies. socioeconomic status achievements depend on the educational background a person brings to the urban labor market.

2. Age Selectivity

Migration (Matras, 1973; Petersen, 1975) and job mobility (Palmer, 1954) are, of course, age-specific. Thus, age appears to be a major factor in the status-attainment process because young migrants might have more occupational achievement than older migrants. Based on data from the Six City Survey of Labor Mobility in 1951, Lane (1977) examines the effect of migration on the occupational prestige and mobility of about 4,000 U.S. men aged 35-64. Comparing migrants to non-nigrants, she found that the former are superior in mean socioeconomic statuses. Migrant superiority was due to initial advantages for men aged 35-44 only. This suggests that age is a relevant factor in the mobility experience for migrants and non-migrants. Once age is controlled, there is a positive migration effect on occupational status only for young men (below 45 years), while negative effects appear for older men. In an earlier study, Lane (1968) also found the same result. These two

studies generally confirm the findings of Blau and Duncan (1967) and Duncan et al. (1972) regarding the influence of selection on the superior occupational achievement of migrants.

Research in developing societies, however, has produced results which are contrary to U.S. findings. Using correlation analysis, Bock and Iutaka (1969) found an extremely low correlation between age at migration and social mobility. They concluded that age at migration and age appear to be of little or no predictive value for the social mobility of migrants to the cities. Raczynski (1972) found that there are mean occupational achievement differences between those who came at age 15 or earlier and those who arrived between aged 16-29, in which the former have done slightly better than the latter. Controlling socioeconomic background, the only difference is, he concluded, between migrants who arrived in Santiago at age 30 or older and those who arrived at an earlier age. However, the difference is very slight, suggesting that some special conditions of the labor market might have effects on occupational achievement for migrants.

3. Gender Differences

The above studies have focused on occupational mobility and attainment of male migrants and have disregarded the occupational mobility pattern of females. However, the unprecedented growth during the last few decades in the proportion of married women in the labor force (Oppenheimer, 1970) has translated into significant increases in the proportion of families in which both the husband and wife are in the labor force (Petersen, 1975). This change finds women pursuing not only traditional occupations but also occupations previously dominated by men. Using a sample of 992 households located in 37 fast-growing nonmetropolitan counties in the Upper Great Lakes area and Duncan SEI scores as measures of occupational mobility, Rank and Voss (1982) find that females fare worse than their male counterparts.

Previous research indicates that family migration often disrupts the work experiences of married women (Duncan and Perrucci, 1976; Ferber and Huber, 1979; Lichter, 1980, 1983; Long, 1974). Each researcher concluded that geographic mobility is detrimental to wives' continued participation in the labor force. When

the family of a working wife moves, she is less likely to be employed after the move. The greater the distance moved, the lower the likelihood of employment. Duncan and Perrucci (1976) find that neither the prestige of wives' occupations nor their relative contribution to family income influences relocation; only the characteristics of the husband's job are relevant. Therefore, if a married woman migrates in response to her husband's economic opportunities rather than her own, then migration can be viewed as having a negative effect on job continuity. Research has indicated that job continuity is, indeed, a crucial factor in women's occupational status and attainment in developed countries (Mincer and Polachek, 1974; Polachek, 1975; Rosenfeld, 1978).

Unfortunately, little research concerns gender differences in migration in developing countries. Analyzing 98 female migrants from two rural communities in northern Taiwan, Huang (1984) summarized her findings as follows: (1) a third of her sample were working in factories; (2) a few were engaged in unskilled manual work and in various urban services; and (3) only one in 20 was engaged in white-collar jobs. This finding suggests that female social mobility is still very limited after rural-to-urban-migration in Taiwan since few make a long-term commitment to work (Huang, 1984). However, she does not compare migrants to nonmigrants in her research.

b. Information Hypothesis

The information hypothesis suggests that the distant location of family and friends first encourages and, second, directs migration by increasing the potential migrant's awareness of conditions, particularly job opportunities, at the distant location. Thus, social ties play an important role in various phases of the migration process. Research showed that relatives and niends were the major source of information about the receiver area (Choldin, 1973; Lansing and Mueller, 1967; Litwak, 1960; Tilly and Brown, 1967). Generally, the more highly educated groups were less likely to rely on friends and family for information or to locate near relatives and friends than the less educated. These findings also confirm that social ties help migrants to obtain housing or assist in finding employment.

Social networks not only assist individuals to obtain employment but also influence individuals' occupational mobility. The newly arrived are less familiar with the market than the older residents, and among the new migrants, we might assume that those who migrated from urban areas knew more about the kind of labor market they would face than those who came from other kinds of labor markets. Lurie and Rayack (1966) found that the majority of American workers found their current jobs through friends or relatives, or by applying directly to the firm. Comparing migrants to non-migrants, they found that migrants relied more on their friends and relatives to find their current jobs than on direct application at a firm. This study, however, did not control individuals' educational attainment. Holding educational attainment constant, Rossi (1973) found that friends and relatives are the most commonly employed channels of information, although direct application to employers is also important. More importantly, he shows that the lower educational levels tend to rely more on friends and relatives, and the higher educational groups use more active and impersonal means-direct application and to some extent, private and public employment agencies. He also concluded that both educational attainment and means used to find first and current jobs influenced occupational prestige. However, the major effect of means employed to find jobs occurs for the better educated groups. College graduates who rely on the informal help of friends or relatives obtain first jobs with considerably lower prestige than those who rely on direct application, employment agencies and advertisements.

At the same time, Granovetter (1973, 1974) argued that weak ties have a special role in a person's opportunity for mobility-that there is a "structural tendency for those to whom one is only weakly tied to have better access to job information one does not already have". In his empirical study, Granovetter (1974) found that if weak ties are defined by infrequent contact around the time information about a new job was obtained, then professional, technical, and managerial workers were more likely to hear about new jobs. Lin, Ensel, and Vaughn (1981) use similar definitions of weak and strong ties to probe the relation between tie strength and occupational status attainment. Their central findings was that the use of weak ties in finding jobs has a strong association with higher occupational achievement only insofar as the weak ties connect the respondent to an individual who is well placed in the occupational structure. In another study, Lin, Vaughn, and Ensel (1981) found that only the use of formal channels showed a slight positive effect on first occupational status. In addition, they concluded that those who use personal contacts hold a substantial advantage in the occupational attainment process if (1) they have access to and use greater social resources, and (2) the social resource's role in transferring the individual from the initial status to the achieved work status persists throughout his socioeconomic life.

In research on Chinese immigrants in Chicago, Li (1978) examined kinship assistance and occupational mobility. Based on the Blau-Duncan basic model and adding kinship assistance into the model, he found that education and kinship assistance have a negative relationship. He concluded, moreover, that kinship assistance restricts occupational mobility for Chinese immigrants. He noted that those who are more highly educated tend to seek non-ethnic jobs, i.e., they became professionals. The less educated found their ethnic jobs-entrepreneurial businesses—through kinship assistance. This would imply that education is important for occupational mobility.

Individuals may have access to more or less complicated networks of communication which contribute to their stock of social information and determine individual life chances in the city. If this is true, one might assume that access to sources of information before migration is positively related to status of first job in city. That is, the greater their access to information before migration, the better will be their first job in the city. Using eight "migration preconditions" as indicators of access to sources of information in the city, Hogan and Berlinck (1976) found that (1) the more prepared migrants obtain better jobs in Sao Paulo; (2) the indicators of access to information are more important in predicting occupational success of middle-class migrants.

Considering reasons for choosing their first jobs, Huang (1984) concluded that most female migrants cited "being introduced to the work by relatives" and "being able to work with friends" as their reasons for their first jobs. About 35 percent choose their first jobs through relatives or friends. Compared to the second job, this relation declined over time (Huang, 1984). This may demonstrate the role of increased knowledge of the new environment. However, one shortcoming is that she used a small sample.

B. Research Hypotheses

Based on theoretical orientation and incorporating the Blau-Duncan basic model, I propose a research framework as shown in Figure 2:

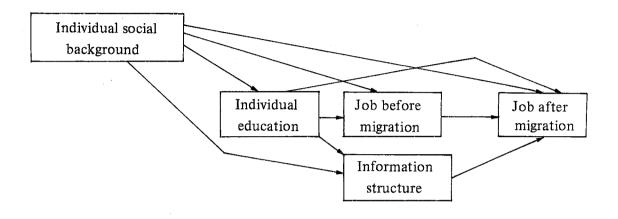


Figure 2: A Model of Migration and the Process of Occupational Attainment

This model suggests that: (1) individual social background will influence educational achievement; (2) individual social background and individual education will influence occupational achievement before migration; (3) individual social background and individual education will influence individual's access to sources of information; and (4) individual social background, individual education, occupational achievement before migration, and an individual's information structure will influence individual occupational achievement after migration.

III. ANALYSIS

This part is an empirical evaluation of the theoretical model proposed in research hypotheses section. The model is an explanation of intragenerational mobility among cityward migration to Kaohsiung City, Taiwan. The results are presented in path model.

We assume a causal order in our hypothetical model (see research hypotheses section). To estimate the relationship between endogenous and exogenous variables, regression analysis was utilized. The path model consists of nine variables. Of which, six variables were classified into two major sets: individual and household background and information structure. The other three variables were occupational prestige before move and first and current occupational prestige after migration. The descriptions and codes of all variables in the path model are shown in Table 1.

Table 2 contains the means, standard deviations, and zero-order correlations among variables. The first four variables in the correlation matrix represent the individual background. The information structure variables are presented in variables five and six. The last three variables show occupational prestige of the respondent before and after migration.

After dropping some insignificant variables, the revised model is presented in figures 3 to 6 for both urban and rural migrants.² Figures 3 and 5 represent path model of the process of stratification for first and current jobs for urban migrants while figures 4 and 6 are for rural migrants. The path coefficients also show up in the figures.

Since this is a recursive model, identification is not an issue. The error or residual of each regression is assumed to be random and independent of other residuals or variables. Exogenous variables are determined outside the model, and the arrow between them is not causal. That is, the curved line with arrowheads at both ends does not represent dependence or causal relationship, but simply the fact that predetermined variables are correlated for whatever reasons. On the other hand, the arrow from outside the model are residuals. For example, there are four arrows representing residuals in figure 3. All the arrows in th models can be interpreted as

We run separate regression of male and female within migrant status. The regressions show similar patterns as presented in figures 3 to 6. However, AGE and CITYEXP are not statistically different for male and female in rural migrants. This may cause special errors in our model.

Table 1: Description of Variables in the Regression Analysis.

Variables	Descriptions	Codes
Individual Background		
EDUYEAR GENDER	Education of respondent Gender of respondent	An interval scale in years A dummy variable with 1 = male; 0 = female
ETHNICITY	Ethnicity of respondent	A dummy variable with 1 = Mainlanders: 0 = Taiwanese.
AGE	Age of respondent	An interval scale.
Information Structure		
ASSIST	Relative assistance	A factor index with zero mean and unit variance.
CITYEXP	City experience	A factor index with zero mean and unit variance
Occupational Prestige		
OCBEFORE	Treiman's (1977) score for	An interval level variable.
OCFIRST	Treiman's (1977) score for	An interval level variable.
OCNOW	Treiman's (1977) score for current occupation.	An interval level variable.

Table 2: Zero-order Correlation Coefficients, Mean and Standard Deviation Among Variables

ДI.	EDUYEAR	GENDER E	ETHNICITY	AGE	ASSIST	CITYEXP (OCBEFORE	OCFIRST	OCNOW
EDUYEAR	1.0000	0.1089	-0.0673	-0.3009	0.0634	0.1997	0.4888	0.4820	0.4846
GENDER	0.2314	1.0000	-0.0157	0.0724	0.1294	0.0941	0.1571	0.1852	0.1872
ETHNICITY	0.2841	0.0475	1,0000	0.3019	0.0045	0.0937	0.0101	-0.0029	-0.0018
AGE	-0.1473	0.0458	0.1771	1.0000	-0.1105	-0.0738	0.0147	-0.0107	-0.0071
ASSIST	-0.1679	-0.0553	-0.1013	-0.0125	1.0000	0.0300	-0.0449	-0.1016	0.1284
CITYEXP	0.1961	0.0399	0.1068	-0.0013	-0.0593	1.0000	0.0811	0.1680	0.1582
OCBEFORE	0.5433	0.2805	0.2124	0.1311	-0.1730	0.0858	1.0000	0.6277	0.6088
OCFIRST	0.5521	0.2569	0.2125	0.1377	-0.1297	0.1708	0.7930	1.0000	0.9452
OCNOW	0.5376	0.2831	0.1716	0.1433	-0.1130	0.1240	0.7302	0.9351	1.0000
Urban Migrants ¹	1	•							
MEAN	9.6293	0.8233	0.1595	32.7716	0.0000	0.0000	41.7845	41.2931	41.7112
STD DEV	4.3455	0.3823	0.3669	8.5587	1.0000	1.0000	13.3318	13.6661	13.2469
Rural Migrants ¹	•								
MEAN	7.6500	0.8273	0.0455	31.1864	0.0000	0 0000	37.1682	35.2546	35.1909
STD DEV	4.0634	0.3789	0.2088	8.3418	1.0000	1.0000	11.5357	11.6270	11.3464

Note: The upper right-hand corner of the table shows correlation for rural migrants while the lower left side represents correlation. 1 This classification is based on I in's (1978) definition for urban migrants.

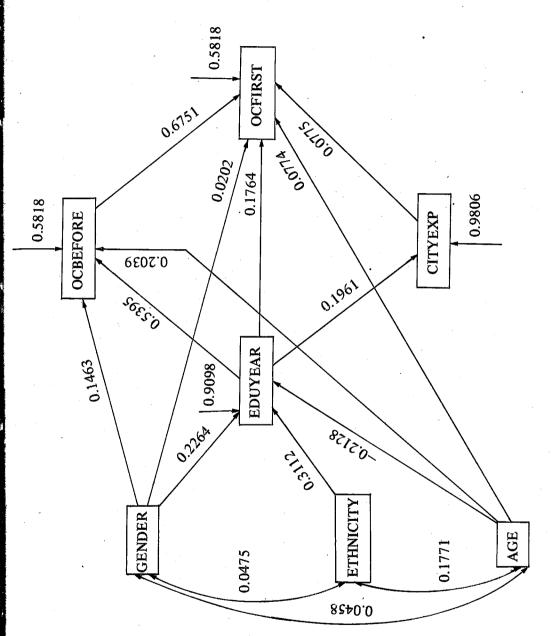


Figure 3: Path Model of the Process of Stratification for First Job After Move for Urban Migrants.

Figure 4: Path Model of the Process of Stratification for First Job After Move for Rural Migrants.

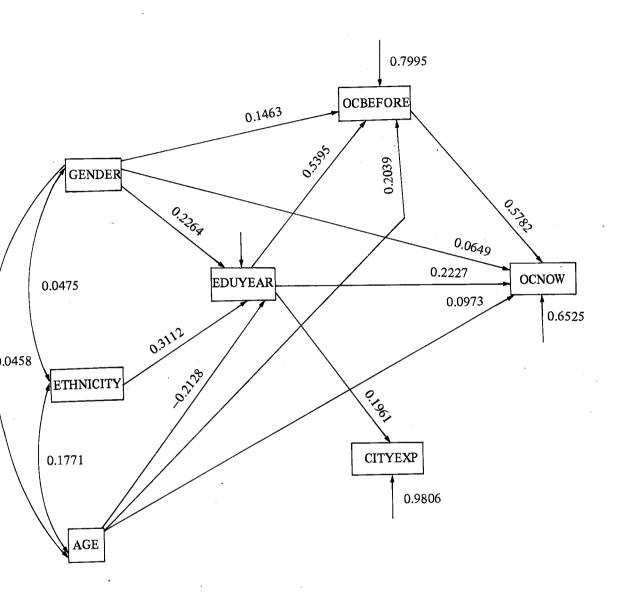


Figure 5: Path Model of the Process of Stratification for Current Occupation of Urban Migrants.

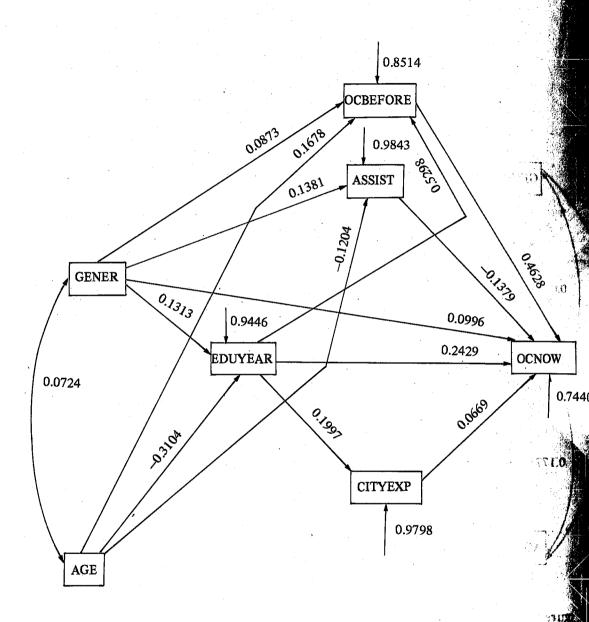


Figure 6: Path Model of the Process of Stratification for Current Occupation of Rural Migrants.

the direct and indirect effects of the exogenous variables on the dependent variables.

Moreover certain factors initially conceived to be causes of outcome later are not sufficiently important empirically to need representation in the path diagram as direct influences. For instance, in the urban migrants, age and gender have statistically significantly direct paths to occupational prestige before move, while ethnicity does not. However, factors that are not directly influential may have indirect influences on the dependent variables. The direct effect is simply a path coefficient between an exogenous and an endogenous variables. The indirect effect, however, is that of multiplication of the coefficients attached to connecting path. In figure 3, for example, the direct effect between gender and EDUYEAR is 0.2264. The indirect effect between gender and OCBEFORE through EDUYEAR is (0.2264) X (0.5395)=0.1221. Thus, the total effect equals the sum of direct and indirect effects. Still, there may be a spurious or unanalyzed effect among the exogenous variables (unanalyzed effect) or endogenous variables (spurious effect). Therefore, total correlation between two variables that can be decomposed into three components: direct, indirect, and spurious or unanalyzed effects. Tables 3 to 6 presents the decomposition of the zero-order correlation. These results are computed from the path models of figures 3 to 6.

Tables 3 to 6 also allow an assessment of how much of the total association between two variables is spurious or unanalyzed. The correlation between AGE and CITYEXP in table 3, for example, is a spurious relationship under the influence of GENDER and ETHNICITY. About 32 percent (0.0420 ÷ 0.1311) of the total association between AGE and occupational prestige before move (OCBEFORE) is spurious under the joint influence of GENDER and ETHNICITY. Gender has an effect of 0.2448 on first occupational prestige after migration, of which 0.1258 is via the effect of the education attainment (EDUYEAR) and 0.0988 is via the effect of occupational prestige before migration (OCBEFORE).

Educational attainment is the most important factor in determining occupational status. The reduced size of the path coefficient between GENDER and current occupational status (OCNOW) demonstrates this point. The direct effect of GENDER on current occupational status (OCNOW) in table 4, for example, is 0.0900. Thus, individual background does not play an important role in deciding occupational status of men or women.

Table 3: Decomposing the Effects of Variables for First Job After Move for Urban Migrants in the Path Model.

Dependent Variable	Pre- determined Variable	Correla- tion	Total Effects	EDUYEAR	Indirect Effect via OCBEFORE CITYEXP	Direct Effect	Spurious or Unanalyzed Effect
EDUYEAR	GENDER ETHNICITY AGE	0.2314 0.2843 -0.1473	0.2264 0.3112 -0.2128			0.2264 0.3112 -0.2128	0.0050 -0.0269 0.0655
OCBEFORE	GENDER ETHNICITY AGE EDUYEAR	0.2805 0.2124 0.1311 0.5433	0.2684 0.1679 0.0891 0.5395	0.1221 0.1679 -0.1148		0.1463 0.2039 0.5395	0.0121 0.0445 0.0420 0.0038
CITYEXP	GENDER ETHNICITY AGE EDUYEAR	0.0399 0.1068 -0.0013 0.1961	0.0444 0.0610 -0.0417 0.1961	0.0444 0.0610 -0.0417		0.1961	-0.0045 0.0458 0.0404
OCFIRST	GENDER ETHNICITY AGE EDUYEAR OCBEFORE CITYEXP	0.2569 0.2125 0.1377 0.5521 0.7930 0.1708	0.2448 0.1729 0.0939 0.5592 0.6751	0.1258 0.1729 -0.1182	0.0988 0.1377 0.3642 0.0186	0.0202 0.0744 0.1764 0.6751 0.0775	0.0121 0.0396 0.0438 -0.0071 0.1179 0.0933

Table 4: Decomposing the Effects of Variables for First Job After Move for Rural Migrants in the Path Model.

Dependent d Variable	Pre- determined Variable	Correla- tion	Total Effects	EDUYEAR	Indirect Effect via EDUYEAR OCBEFORE ASSIST	ffect via ASSIST CITYEXP	Direct Effect	Spurious or Unanalyzed Effect
EDUYEAR	GENDER AGE	0.1089	0.1313				0.1313	-0.0225 0.0095
OCBEFORE GENDER AGE EDUYEA	GENDER AGE EDUYEAR	0.1571 0.0147 0.4888	0.1569 0.0033 0.5298	0.0696			0.0873 0.1678 0.5298	-0.0002 0.0114 -0.0410
ASSIST	GENDER AGE EDUYEAR	0.1294 -0.1105 0.0634	0.1381	·			0.1381	-0.0087 0.0099 0.0634
CITYEXP	GENDER AGE EDUYEAR	0.0941 -0.0738 0.1997	0.0262 -0.0620 0.1997	0.0262			0.1997	0.0679
OCFIRST	GENDER AGE EDUYEAR OCBEFORE ASSIST CITYEXP	0.1852 -0.0107 0.4820 0.6277 -0.1016 0.1680	0.2368 -0.0809 0.5048 0.4939 -0.1074 0.0783	0.1173	0.0431 0.0829 0.2617	-0.0136 0.0129 0.0211	0.0900 0.2220 0.4939 -0.1074 0.0783	-0.0516 0.0702 -0.0228 0.1338 0.0058 0.0897

Table 5: Decomposing the Effects of Variables for Current Occupation of Urban Migrants in the Path Model.

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Spurious or Unanalyzed Effect	0.0050 -0.0269 0.0655	0.0121 0.0445 0.0420 0.0038	-0.0045 0.0458 0.0404	0.0126 0.0052 0.0419 0.0030 0.1520 0.1240
Direct. U	0.2264 0.3112 -0.2128	0.1463 0.2039 0.5395	0.1961	0.0649 0.0973 0.2227 0.5782
ia CITYEXP				
Indirect Effect via OCBEFORE CI				0.0846 0.1179 = 0.3119
EDUYEAR		0.1221 0.1679 -0.1148	0.0444 0.0610 -0.0417	0.1210 0.1664 -0.1138
Total Effects	0.2264 0.3112 -0.2128	0.2684 0.1679 0.0891 0.5395	0.0444 0.0610 -0.0417 0.1961	0.2705 0.1664 0.1014 0.5346 0.5782
Correla- tion	0.2314 0.2843 -0.1473	0.2805 0.2124 0.1311 0.5433	0.0399 0.1068 -0.0013 0.1961	0.2831 0.1716 0.1433 0.5376 0.7302 0.1240
Pre- determined Variable	GENDER ETHNICITY AGE	GENDER ETHNICITY AGE EDUYEAR	GENDER ETHNICITY AGE EDUYEAR	GENDER ETHNICITY AGE EDUYEAR OCBEFORE CITYEXP
Dependent Variable	EDUYEAR	OCBEFORE	CITYEXP	OCNOW

Table 6: Decomposing the Effects of Variables for Current Occupation of Rural Migrants in the Path Model.

			The second secon						
Dependent Variable	Pre- determined Variable	Correla- tion	Total Effects	EDUYEAR	Indirect Effect via OCBEFORE ASSIST	fect via ASSIST	CITYEXP	Direct U Effect	Spurious or Direct Unanalyzed Effect Effect
EDUYEAR	GENDER AGE	0.1089	0.1313					0.1313	-0.0225 0.0095
OCBEFORE GENDER AGE EDUYEA	GENDER AGE EDUYEAR	0.1571 0.0147 0.4888	0.1569 0.0033 0.5298	0.0696				0.0873 0.1678 0.5298	-0.0002 0.0114 -0.0410
ASSIST	GENDER AGE EDUYEAR	0.1294 -0.1105 0.0634	0.1381				,	0.1381	-0.0087 0.0099 0.0634
CITYEXP	GENDER AGE EDUYEAR	0.0941 -0.0738 0.1997	0.0262 -0.0620 0.1997	0.0262		·		0.1997	0.0679
OCNOW	GENDER AGE EDUYEAR OCBEFORE ASSIST CITYEXP	0.1872 -0.0071 0.4846 0.6088 -0.1284 0.1582	0.1869 -0.0613 0.5015 0.4628 -0.1379 0.0669	0.0659	0.0404 0.0777 0.2452	0.0190	0.0134	0.0996 0.2429 0.4628 0.1379 0.0669	0.0003 0.0542, -0.0169 0.1460 0.0095

The data in Tables 3 to 6 indicate that influences of remote cause are largely indirect effect. As we mention in multiple regression analysis (Chang, 1986), ethnicity effect on occupational prestige before or after migration disappear after controlling for other variables. However, all of ethnicity effect on occupational prestige before or after move is indirectly through educational attainment (see tables 3 and 5). More importantly, most effects of GENDER and ETHNICITY are indirect. The GENDER effect in table 3, for example, has an effect of 0.2448 on first occupational prestige after migration (OCFIRST), of which 0.1258 is via the effect of education and 0.0988 is from occupational prestige before migration (OCBEFORE). However, only 8 percent (0.0202 ÷ 0.2448) is direct effect. Thus, most of the influence of the social origin is through educational attainment. This is consistent with the findings of Blau and Duncan (1967). The data on tables 4 to 6 also show a similar pattern.

We also need to emphasize that the estimated parameters of the model are rather different in the urban and rural population. A glance at the tables 3 to 6 will reveal that this is true of the gross correlation as well as most of the path coefficient in figures 3 to 6.

Comparing the figures 3 and 4, for example, we see that the path coefficient from respondent's education to first occupational status after migration is relatively higher for rural migrants (0.2220) than for urban migrants (0.1764). However, the compound path, education (EDUYEAR)→ occupational status before move (OCBEFORE) → occupational status after move (OCFIRST), works out as (0.5298)X (0.4939) = 0.2617 for rural but (0.5395)X(0.6751) = 0.3462 for urban migrants. In terms of the magnitudes of the path coefficients, rural migrants convert education into occupational status, holding constant occupational status before move, at a higher rate than urban migrants, but urban migrants have had better fortune in converting education into occupational status before move and that into first occupational status. This is also true in figures 5 and 6.

Moreover, we need to point out that job assistance by relatives exhibits a negative influence on occupational achievement for rural migrants only. The negative relationship does not vanish when other variables are controlled for (see tables 4 and 6). From the figures 4 and 6, we find that the direct effect between GENDER and job assistance from relatives (ASSIST) is 0.1381. This implies that male receive more

assistance from relatives than that of female. On the other hand, age has a negative direct effect on assistance (-0.1204). What this means is that more young men need job assistance from relatives. Quite surprisingly, educational attainment does not have an effect on job assistance by relatives. This result is similar to Li's findings (1978 for Chinese immigrants in Chicago. Part of the explanation is that most rural migrants have lower educational attainment (mean = 7.65 years). Perhaps job assistance by relatives could be worked for relatives for migrants.

IV. CONCLUSION

Our analysis indicate that education has a direct independent effect on occupation. In Taiwan, education is also used as a criterion in allocating people into different positions. Although individual background in itself is not an important variable in influencing occupational prestige, either before or after migration, it may have an indirect effect on occupational prestige through the educational attainment of migrants. Thus, educational attainment plays an important role in the social stratification process in Taiwan just as in other developed societies.

Surprisingly, assistance from relatives has not influenced the urban migrants' first or current occupation in terms of occupational prestige scores. For rural migrants, assistance from relative has a negative effect on the occupational prestige of the first or current job. Although kinship interaction is important for rural migrants, assistance from relatives seems more salient for less educational migrants than better educated one since the former need assistance to help them find a job. Obviously, the more prestigious jobs require higher education and specialized skills. Those jobs which relatives can find may consist mostly of "marginal" or "temporary" jobs. It is possible that relatives had only limited knowledge of the market and could not locate the jobs migrants desired. These migrants may concentrate their job search in particular occupations or establishments, primarily because these contacts are most knowledgeable about vacancies in their own occupations and establishments and perhaps because they have the most influence with their own employers. In contrast, those who do not need assistance from relatives may arrange to look for work through formal channels.

REFERENCES

Balan, Jorge

1968 "Are Farmers' Sons Handicapped in the City?" Rural Sociology 33 160-174.

Becker, Gary S.

1964 Human Capital: A Theoretical and Empirical Analysis with Special References to Education. National Bureau of Economic Research No. 80, General Series. New York: National Bureau of Economic Research.

Blau, Peter M. and Otis D. Duncan

1967 The American Occupational Structure. New York: Wiley.

Bock, E. Wilbur and Sugiyama Iutaka

1969 "Rural-Urban Migration and Social Mobility: The Controversy on Latin American." Rural Sociology 34: 343-355.

Bogue, Donald J.

"Internal Migration." in P. M. Hauser and O. D. Duncan (eds.), *The Study of Population: An Inventory and Appraisal*. Chicago, IL.: The University of Chicago Press.

Census Office of the Executive Yuan

1982 The 1980 Census of Population and Housing, Taiwan-Fukien Area, Republic of China, Vol. I-IV. Taipei Taiwan: Census Office of the Executive Yuan.

Chang, Ching-fu

"A Contextual Analysis of Migration and Occupational Achievement in Kaohsiung, Taiwan: Linkage between Micro- and Macro- Level Data."
Ph.D. Dissertation. University of Illinois at Chicago.

Chiswick, Barry R.

- 1978 "The Effect of Americanization on the Earnings of Foreign-born Men."

 Journal of Political Economy 86: 897-921.
- 1982 The Employment of Immigrants in the United States. Washington D. C.: American Enterprise Institute.

Choldin, Harvey M.

1973 "Kinship Networks in the Migration Process." The International Migration Review 7: 163-175.

Duncan, Otis D., D. L. Featherman and B. Duncan

1972 Socioeconomic Background and Achievement. New York: Seminar Press.

Duncan, R. Paul and Carolyn Cummings Perrucci

1976 "Dual Occupation Families and Migration." American Sociological Review 41: 252-261.

Ferber, M. and J. Huber

1979 "Husbands, Wives, and Careers." *Journal of Marriage and Family* 41: 315-325.

Freedman, Ronald and Amos H. Hawley

1949 "Migration and Occupational Mobility in the Depression." American Journal of Sociology 55: 171-177

Goldscheider, Calvin

1971 Population, Modernization and Social Structure. Boston, Mass.: Little, Brown and Company.

Granovetter, Mark S.

- 1973 "The Strength of Weak Ties." American Journal of Sociology 78: 1360-1380.
- 1974 Getting a Job. Cambridge: Harvard University Press.
- "The Strength of Weak Ties: A Network Theory Revisited." Pp. 105-130 in Peter V. Marsden and Nan Lin (eds.), Social Structure and Network Analysis. Beverly Hills, CA: SAGE.

Greenwood, Michael J.

1975 "Research on Internal Migration in the United States: A Survey." The Journal of Economic Literature 8: 397-433.

Grichting, Wolfgang L.

"Occupational Prestige Structure in Taiwan." National Taiwan University Journal of Sociology 7: 67-78.

Hawley, A. H.

1950 Human Ecology: A Theory of Community Structure. New York: Ronald Press.

Hogan, Daniel J. and Nanoel T. Berlinck

1976 "Conditions of Migration, Access to Information and First Jobs: A Study of Migrant Adaptation in Sao Paulo, Brazil." Pp. 225-238 in Anthony Richmond and Daniel Kubat (eds.), *Internal Migration: the New World and the Third World*. Beverly Hills, CA: Sage.

Hsieh, Kao-chiao

1981 Urban Migration and Social Adjustment—A Case Study of Kaohsiung City, Taiwan (in Chinese). Taipei: Chu-liu.

Huang, Nora Chiang

"The Migration of Rural Women to Taipei." Pp. 247-268 in James T. Fawcett, Siew-ean Khoo & Peter C. Smith (eds.), Women in the Cities of Asia. Boulder, CO: Westview Press.

Isard, W.

1960 Methods of Regional Analysis: An Introduction to Regional Science.

Cambridge: M.I.T. Press.

Jansen, Clifford J. (ed.)

1970 Readings in the Sociology of Migration. Oxford: Pergamon Press.

Koo, Hagen and Herbert R. Barringer

1977 "Cityward Migration and Socioeconomic Achievement in Two Korean Cities." Rural Sociology 42: 42-56.

Lane, Angela Victoria

1968 "Occupational Mobility in Six Cities." American Sociological Review 33: 740-749.

1977 "Migration and the Processes of Occupational Mobility and Status Attainment." *Sociological Focus* 10: 43-52.

Lansing, J. B. and E. Mueller

1967 The Geographic Mobility of Labor. Ann Arbor, Mich.: Survey Research Center, University of Michigan.

Lee, Everett S.

1966 "A Theory of Migration." Demography 3: 47-57.

Li, Peter S.

1978 Occupational Mobility and Kinship Assistance: A Study of Chinese Immigrants in Chicago. San Francisco, CA.: R & E Research Associates.

Lichter, Daniel T.

- 1980 "Household Migration and the Labor Market Position of Married Women." Social Science Research 9: 83-97.
- 1983 "Socioeconomic Returns to Migration Among Married Women." Social Forces 62: 487-503.

Lin, Nan, John C. Vaughn and Walter M. Ensel

1981 "Social Resources and Occupational Status Attainment." *Social Forces* 59: 1163-1181.

Lin, Nan, Walter M. Ensel and John C. Vaughn

"Social Resources and Strength of Ties: Structural Factors in Occupational Status Attainment." *American Sociological Review* 46: 393-405.

Lipset, Seymour Martin and Reinhard Bendix

1959 Social Mobility in Industrial Society. Berkeley, CA: University of California Press.

Litwak, Eugene

1960 "Geographic Mobility and Extended Family Cohesion." *American Sociological Review* 25: 385-394.

Liu, Paul K. C.

"Effect of Population Policies on Land Use and Regional Development Simultaneous Model for Taiwan." Pp. 415-443 in National Science Council, Sino-American Workship on Land Use Planning. Taipei: National Science Council.

Long, Larry H.

1974 "Women's Labor Force Participation and the Residential Mobility of Families." Social Forces 52: 342-348.

Lurie, Melvin and Elton Rayack

1966 "Racial Differences in Migration and Job Search: A Case Study." Southern Economic Journal 33: 81-95.

Mangalam, J. J. and Harry K. Schwarzweller

1975 "Some Theoretical Guidelines Toward a Sociology of Migration." Pp. 173-187 in Kenneth C. W. Kammeyer (ed.), Population Studies:
Selected Essay and Research. Chicago: Rand McNally College Publishing Company.

Marsh, Robert M.

- 1970 "Evolution and Revolution: Two Types of Change in China's System of Social Stratification." Pp. 149-172 in A. Tuden and L. Plotnikov (eds.), Essays in Comparative Social Stratification. Pittsburgh, PA.: University of Pittsburgh Press.
- 1971 "The Explanation of Occupational Prestige Hierarchies." Social Forces 50: 214-222.

Matras, Judah

1973 Population and Societies. Englewood Cliffs, NJ: Prentice-Hall.

Mincer, J. and S. Polachek

1974 "Family Investment in Human Capital: Earnings of Women." Journal of Political Economy 82: 76-108.

Moots, Baron L.

1976 "Migration, Community of Origin, and Status Attainment: A Comparison Two Metropolitan Communities in Developing Societies." Social Forces 54: 816-832.

Nam, Charles B. and Susan D. Gustavus.

1976 Population: The Dynamics of Demographic Change. Boston: Houghton Mifflin Company.

Oppenheimer, Valerie

1970 The Female Labor Force in the United States: Demographic and Economic Factors Governing its Growth and Changing Composition.

Berkeley, CA: University of California.

Palmer, Gladys

1954 Labor Mobility in Six Cities: A Report on the Survey of Patterns as Factors in Labor Mobility, 1940-1950. New York: Social Science Research Council.

Petersen, William

1975 Population. New York: MacMillan.

Polachek, S. W.

1975 "Discontinuous Labor Force Participation and its Effect on Women's Market Earnings." in C. B. Lloyd (ed.), Sex, Discrimination, and the Division of Labor. New York: Columbia University Press.

Prehn, John W.

1967 "Vertical Mobility and Community Type as Factors in the Migration of College Graduates." *Demography* 4: 283-292.

Raczynski, Dagmar

1972 "Migration, Mobility, and Occupational Achievement: The Case of Santiago, Chile." *The International Migration Review* 6: 182-198.

Rank, Mark R. and Paul R. Voss

"Occupational Mobility and Attainment among Migrants Entering the Upper Great Lakes Region." Rural Sociology 47: 512-528.

Ravenstein, E. G.

- 1885 "The Law of Migration." Journal of the Royal Statistical Society 48: 167-235.
- 1889 "The Law of Migration." Journal of the Royal Statistical Society 52: 241-305.

Ritchey, P. Neal

- "Urban Poverty and Rural-to-Urban Migration." Rural Sociology 39: 42-55.
- 1976 "Explanations of Migration." Annual Review of Sociology 3: 363-404.

Rosenfeld, Rachel A.

1978 "Women's Employment Patterns and Occupational Achievements." Social Science Research 7: 61-80.

Rosenfeld, Rachel A. and Aage B. Sorensen

1973 "Sex Differences in Patterns of Career Mobility." *Demography* 16: 89-101.

Rossi, Peter H. and Michael D. Orenstein

"The Impact of Labor Market Entry Factors: Illustrations from the Hopkins Social Accounts Project." in Muller Walter and Karl Ulrich Mayer (eds.), Social Stratification and Career Mobility. Paris: The Hague.

Scudder, Richard and C. Arnold Anderson

1954 "Migration and Vertical Occupational Mobility." *American Sociological Review* 19: 329-334.

Sjaastad, Larry A.

1962 "The Costs and Returns of Human Migration." *Journal of Political Economy* 70: 80-94.

Sorensen, Aage B.

- 1974 "A Model for Occupational Careers." American Journal of Sociology 80: 44-57.
- 1975 "The Structure of Intragenerational Mobility." *American Sociological Review* 40: 456-471.

Speare, Alden, Jr.

- 1971 "An Assessment of the Quality of Taiwan Migration Registration Data."

 Taiwan Working Paper, No. 12, Ann Arbor, MI.: Population Studies
 Center, University of Michigan.
- 1974 "Urbanization and Migration in Taiwan." *Economic Development and Cultural Change* 22: 302-319.

Stouffer, S. A.

1940 "Intervening Opportunities: A Theory Relating Mobility and Distance." American Sociological Review 5: 845-867.

Tilly, Charles and C. Harold Brown

"On Uprooting, Kinship, and the Auspices of Migration." *International Journal of Comparative Sociology* 8: 139-164.

Treiman, Donald J.

1977 Occupational Prestige in Comparative Perspective. New York: Academic.

Wang, Charlotte Shiang Yun

"Social Mobility in Taiwan." Pp. 246-257 in James C. Hsiung (ed.), *The Taiwan Experience 1950-1980*. New York: Praeger.

Wolf, Wendy C. and Rachel Rosenfeld

1978 "Sex Structure of Occupations and Job Mobility." Social Forces 56: 823-844.

高雄市移民職業成就的研究

張清富*謝高橋**

(中文摘要)

本研究的對象是一項民國六十六年移入高雄市人口的抽樣調查資料,其主要目的在結合個別和脈絡變數,以便研究移民的職業成就,本文分析的理論基礎有地位取得理論和資訊來源假設。

應用布勞與鄧肯的基本模式,本文發現移民本身的教育程度爲決定移民本人職業成就的最重要因素。此外,本研究亦發現移民的親友協助只對來自鄉村移民的職業成就有不好的影響,其他變數對移民個人的職業成就没有任何影響。

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A STUDY OF OCCUPATIONAL ACHIEVEMENT OF MIGRANTS TO KAOHSIUNG CITY, TAIWAN

(ABSTRACT)

Based on a survey of 452 migrants who moved into Kaohsiung City, Taiwan, in 1977, this paper tests two major hypotheses of occupational achievement within the context of migration. They are status attainment and information hypotheses.

Using the Blau-Duncan basic model, our data find that educational attainment of migrants is the most important factor in determining an individual's occupational achievement. More importantly, assistance from relatives has a negative effect on occupational achievement for rural migrants only. Other variables do not influence an individual's occupational status.