

**Gender and Employment
Among Latino Migrant
Farmworkers in Michigan**

*by Vivian D. Roeder and Ann V. Millard
Michigan State University*

Working Paper No. 52
August 2000

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ABSTRACT

This study investigates Latino farmworkers in Michigan in regard to "occupational cycles," defined as changes in types of jobs during the year. Data for this study came from a survey of 350 residents of farm labor camps in 12 counties in Michigan. Of labor camp residents, 99% were Latinos (mostly Mexican Americans) and 67% wintered in regions to the south, mostly Texas and Florida. Nearly all women and two-thirds of men lived with family members in households in the labor camps. Statistical tests included cluster analysis and tests of difference of means and proportions including partitioning of chi square and a post hoc test for chi square equality of proportion. Over one-third of study participants had nonagricultural jobs during the preceding year. An unexpectedly high percentage of women had off-farm jobs (42%). The percentage did not differ statistically from that of men (35%). All the jobs were low-paying, but the status of women's off-farm jobs was higher than that of men's. Women with off-farm jobs had worked in significantly more states than other women, typically including Texas rather than Florida, in contrast to men with nonagricultural jobs, who tended to have worked in Florida. Education was not related to women's employment patterns although men with off-farm jobs had significantly more education than others. These findings show that workers in the migrant streams reaching the Midwest are more diverse in employment than expected, and that this complexity characterizes women working in the nonfarm sector as well as men. Furthermore, the position of women migrant workers in generating income for their households is more important than expected.

The Julian Samora Research Institute is committed to the generation, transmission, and application of knowledge to serve the needs of Latino communities in the Midwest. To this end, it has organized a number of publication initiatives to facilitate the timely dissemination of current research and information relevant to Latinos. The Julian Samora Research Institute Research Report Series (RR) publishes monograph length reports of original empirical research on Latinos in the nation conducted by the Institute's faculty affiliates and research associates, and/or projects funded by grants to the Institute.

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Table of Contents

Latino Migrant Farmworkers and Occupational Mobility	1
Data and Methods.....	4
Findings	6
Geography and Migrant Stream	11
Discussion and Conclusion.....	13
Endnotes	14
References	15

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Gender and Employment among Latino Migrant Farmworkers in Michigan

It is well known that most migrant farmworkers change employers and move from farm to farm in an annual cycle to follow the availability of farm work requiring hand labor in the fields. We term this annual shift from job to job an “occupational cycle.” Our analysis focuses largely on the shift to nonagricultural types of employment and its variation by gender. Crossover of migrant workers into nonagricultural jobs has received little attention by researchers, as have patterns of work by women in the migrant stream. About one-third of Michigan migrant farmworkers work off-farm at some point in their occupational cycles according to findings presented here, and women and men differ significantly in nonagricultural employment.

Interstate migrant farmworkers in Michigan have particularly long routes of travel, as nearly all winter in Florida, Texas, and Mexico. The long distances and Michigan’s short growing season ensure that the state’s migrant workers must shift jobs and locations through an annual cycle; however, we had not expected that many members of the migrant stream would cross into nonagricultural sectors for work. In particular, as women have been described in other studies as having supporting roles in households, we had not expected that they would tend to take the lead in off-farm employment by taking higher-status jobs.

In this paper, we focus on the gendered nature of the lives of migrant workers. Specifically, we relate gender to off-farm jobs through statistical analysis dealing with types of work, migration patterns, education, and household type.

Latino Migrant Farmworkers and Occupational Mobility: Literature and Focus

Latino Migrant Farmworkers. A migrant farm laborer is a person who seeks agricultural work away from his/her home. The U.S. Department of Agriculture (USDA) and Public Health Service (PHS) define migrant workers as those who earn more than 50% of their earned incomes harvesting or performing agricultural labor, and spend the night away from home (or cross a county line) in order to perform agricultural work [Slesinger, 1992: 227].

Farmworkers from Florida, Texas, and in some cases, Mexico, annually come to the Midwest for seasonal and summer work (Valdes, 1991 as cited in Rochín, 1995). Nearly all are Latinos, most of whom are Spanish speaking and have little facility with English, even those originating from Texas or Florida (Metz, 1990). With about 45,000 migrant laborers (Michigan Commission on Spanish Speaking Affairs, 1997), Michigan is the nation’s fourth largest employer of migrant farmworkers.

Description of Farmworkers Nationwide. A 1991 Department of Labor national survey found that one-third of migrant farmworkers were less than 30 years old, more than half had less than eight years of education and had earnings below the federal poverty level, and two-thirds were Latino (Slesinger, 1992). Vaughan described a sample of 437 Mexican farmworkers in southern California as having a mean age of 35.6 years; mean number of years in school of 5.8; the mean number of years spent as a laborer of 12.4, and working 8.5 months per year on average. Less than half (43.8%) had worked in jobs outside agriculture, 21.2% knew of nonagricultural jobs of equal pay, and for 81.4%, agriculture was the principal source of income. In Michigan, the migrant farmworker population contrasts with that in southern California, as Michigan workers mostly do not come directly from Mexico, but are citizens or legal residents, many of whom grew up and were educated in the U.S.

Employment. For migrant farm laborers, whether they have jobs outside agriculture is one indication of economic opportunity (Vaughan, 1995). Migrant labor is a low status job that leads to few other opportunities. Migrant laborers generally have no employment security, no benefits, poor living conditions, poor pay, requirements to travel and work long hours, and are frequently exposed to agricultural chemicals. It is therefore useful to explore what jobs outside agriculture have been available to migrants and factors that may influence migrant laborers’ capability to move outside of agricultural work and improve their employment mobility. The literature indicates that finding work outside agriculture is related to various factors, including legal or illegal status of migrant farmworkers, and subjective assessment of mobility. In this paper, we explore employment in relation to gender and include other variables dealing with membership in different migrant streams, education, English language capability, and household composition.

In regard to occupational mobility of low-income Latinos, we draw on the work of Kossoudji and Cobb-Clark (1996) and Segura (1989). For undocumented workers, upward wage mobility parallels occupational mobility. Workers, as they gain more experience in the U.S., obtain increased skills and knowledge relevant to the U.S. labor market (Kossoudji and Cobb-Clark, 1996). "From the dishwasher to busboy to waiter, or from picker to packer to tractor driver are two common unauthorized mobility examples" (ibid.: 902). Kossoudji and Cobb-Clark also report other issues that are relevant to undocumented workers in the U.S. Workers learn about other jobs from information received from their current employment. Workers are likely to have to move involuntarily so as to escape apprehension. The lack of legal status limits the sphere of employment opportunities to certain segments of the job market. We would add that ability to speak and understand English is important in the mobility described by Kossoudji and Cobb-Clark.

Segura (1989) found an unexpected constraint on upward mobility in a sample of 20 Chicanas and 20 resident Mexican immigrant women living in the San Francisco Bay Area in 1978-1979 and 1980-81. The author concluded that subjective feelings of upward mobility occurred when women compared themselves to their Chicana-Mexicana working-class referent group's successes and failures and therefore a large portion of women in the study were content with their low-paying jobs and few opportunities to advance.

Migrant Streams. This article examines migrant streams, education, and language preference as they relate to work opportunities outside agriculture. Vaughan (1995) found in California that the more that migrants traveled for work throughout the state, the less stable and more limited their socioeconomic circumstances. The migrant stream in which farmworkers travel is likely to affect employment outside agriculture as well as types and duration of farm employment.

The migratory pattern of Michigan's workers can be described in terms of sending states, where the workers reside during the winter, and receiving states, to which they travel for work. Three migrant streams are described in the literature (Slesinger, 1992; Jasso and Mazorra, 1984). They describe two main patterns that reach Michigan. First, one migrant stream, composed mostly of Mexican Americans and Mexicans, begins from Texas and reaches Michigan by way of Louisiana, Arkansas, Missouri, Illinois, and Indiana. The Texas stream is largely made up of families with several generations, including

women and children who also work in the field (Jasso and Mazorra, 1984). Another stream arrives in Michigan from Florida by way of Georgia, South Carolina, North Carolina, Tennessee, Kentucky, Indiana, and Ohio. It is derived from the "East Coast migrant stream," which includes African- and Euro-Americans, Puerto Ricans, Haitian refugees, Jamaicans, and other West Indians. Of people in this stream, those who travel to Michigan are nearly all of Mexican American or of Mexican descent. In addition, some migrants settle in Midwestern states and compete seasonally for jobs with migrant farmworkers from Texas and Florida (Barger and Reza, 1994 as cited in Rochín, 1995:293).

Education. Low educational levels tend to lead to fewer work opportunities for migrant farm laborers (Chavira-Prado, 1992). Latino farmworkers have less education on average compared with other Latinos and Whites and therefore are less able to compete for jobs outside agriculture. Among adults who are at least 25 years old, only half of Latinos (51%) have completed high school compared with 80% of non-Latinos (Chapa and Valencia, 1993 cited in Rochín, 1995). A Latino migrant farmworker's median years of education was 5.4 years in 1979 compared to Whites at 12.3 years (Pollack, 1979 as cited in Jasso and Mazorra, 1984). The adult Latino population is less educated on average because it includes a subpopulation of Latin American immigrants, many of whom arrived in the United States with less than eight years of schooling (Rochín, 1995). Also contributing to the continued low levels of education is the nature of migrant farm work that requires children to move from school to school in spring and fall following the harvest.

For migrant farmworkers, education can lead to more job options (Vaughan, 1995). In southern California, migrants who had completed more years of education believed they had more job options than those who had completed fewer years (Vaughan, 1995). Kossoudji and Cobb-Clark studied 2,110 Latino men who initially entered the U.S. between 1973 and 1982 and had applied for legalization as a result of the Immigration Reform and Control Act (IRCA) of 1986. Sixteen percent had less than four years of education, 35% had 4-6 years of education, 28% had 7-11 years of education, and 22% had a high school diploma or higher. Only 12% had completed their last year of education in the U.S., indicating that most of the education had been obtained in their country of origin. They speculated that this education is worth less in the job market than U.S. education would be, although we would add that this relationship could be confounded by differences in fluency in English.

Although research in this area has been limited to men, education is probably an important predictor for female migrant farmworkers' obtaining jobs outside agriculture. Even when socioeconomic variables are controlled, the level of education is reported as the most important predictor of Chicanas' labor force participation (Cooney, 1975 as cited in Andrade, 1982).

English Language. Employment outside of agriculture is also enhanced by English language ability (Chavira-Prado, 1992), and few immigrants from Mexico speak English (Rochín, 1995). In the study of Latino IRCA applicants, even though they had an average of ten years of U.S. work experience, 28% reported not knowing English (Kossoudji and Cobb-Clark, 1996). This same study found that only 20 of 179 occupations accounted for 75% of all the first jobs that they held in this country — jobs with no interaction with the public such as work in agriculture and in restaurant kitchens as food preparers and cooks. More than one-third of the study participants were in the bottom 10 ranked occupations (Kossoudji and Cobb-Clark, 1996). Furthermore, they found that English language is a significant determinant of occupational mobility — those more versed in the English language were more likely to be upwardly mobile.

In summary, farmworkers who do not speak English and who have little education are limited in employment opportunities outside agriculture. Some analyses depict them as bound to their “rural communities of protection and culture, but they also become increasingly isolated from the rest of the United States that is non-Hispanic” (Rochín, 1995:300). On the other hand, this article shows a complex interweaving of agricultural and nonagricultural employment. It is not clear whether these contrasts are due to economic change leading to greater availability of jobs in the service sector or perhaps, differences in research methods.

Household. This article also examines households as they relate to work opportunities outside agriculture. “Kinship networks offer social, emotional, and economic support and assistance with migration and settlement” (Zinn 1981:263). Economic conditions affect the family, and gender roles within the family influence economic viability (Chavira-Prado, 1992). While it is true that the intersection of class, ethnicity, and gender influences the resources of a family, this paper focuses on the relationship of gender to employment other than farm labor. Chavira-Prado, on the basis of ethnographic interviews and participant observation in southern Illinois with 11 Tarascan women from Cheran, Michoacan, Mexico,

states that opportunities for work outside agriculture is more limited for women than for men because of the view that women's roles are “helpers or dependents” and men's traditional role in the family is the main worker.

Little research has addressed women's migration from Mexico (Donato, 1993). Studies have reported that women migrant workers usually are attached to families, and women's migration has been associated with following other family members who had gone ahead and established residency (Donato, 1993). Chavira-Prado noted that female-headed households do not exist among migrant farmworkers because farmers prefer to hire men as workers and an undocumented Mexican migrant woman cannot survive without being attached to a man. Migrants with families are more likely to be poor than single migrant farmworkers (Slesinger, 1992) because they have more expenses. Therefore, women put their children to work as a way of increasing the household's income and placing a family at further advantage by connecting the family to outside resources (Chavira-Prado, 1992).

Chavez (1988) compared single migrants in San Diego to those accompanied by spouses or children in a snowball sample of 2,103 adult undocumented migrants born in Mexico. Chavez reported that prior classification categories of migrant laborers such as Mines and Kearney were based on length of residence. Each classification system developed characteristic migration and residence patterns and reported different participation in the U.S. labor market. Chavez examined the *process* of establishing long-term settlement patterns and focused on migration experiences, household composition over time, residency patterns, and labor market participation. He concluded that single migrants were more likely to be temporary workers in the U.S., maintaining their ties back home in Mexico, whereas migrants living with their families viewed their employment as more secure and desired to remain in the U.S.

Donato (1993) examined more completely the determinants of female migration from surveying a random sample of 150-200 persons within each of 10 Mexican communities during the winters from 1987-88 through 1990-91. Interviews were also conducted in the U.S. with 20 outmigrants from each of five sending communities. She found that once a woman migrated to the U.S., she usually continued to do so as a strategy to gain upward economic mobility. This finding is consistent with previous studies of male immigrants from Mexico. In addition, she found that women migrants tended to come from entrepreneurial households in Mexico, to have six plus

years of education, and to migrate to reunite with their families. This is in contrast to those in families who owned land, in which case women stayed at home to keep the land while the men migrated. Donato concluded that female migration is a “function of the structural characteristics of Mexican households” (Donato, 1993:767).

Other studies have documented the interrelationships between work and family life. A household survey of 219 Mexican male migrant workers from Jalisco, Mexico who migrated to California reported that migrants experienced changes in work patterns and family roles when they moved from one place to the other (Guendelman, 1987). The U.S. provided economic support to the men whereas home and family provided them with social and emotional support. An ethnographic study of one male migrant farmworker in southern New Jersey during 1980-81 concluded that poverty, a large family, and limited schooling caused him to accept employment in the U.S. (Shimahara and Condon, 1984).

There have been studies about migrant farmworkers’ families, migrant streams, and employment outside agriculture. However, there are few studies of migrant farmworkers that explicitly compared men and women with regard to these variables.

Research Questions. In this paper we focus on gender differences as they relate to factors of age, education, household composition, migration patterns, and occupations outside agriculture. We have one main research question: among migrant farm workers in Michigan, do women differ from men in education, language skills, and patterns of work? Also, we examined interactions between gender and other variables of interest, such as membership in a given migrant stream.

Data and Methods

This study analyzes data from a survey of residents of agricultural labor camps in 12 counties in southern Michigan. The questionnaires were administered orally to 350 study participants. The part of the questionnaire analyzed here dealt with social and economic characteristics of farmworkers. Several questions dealt with age, education, and household composition in the labor camp. Questions on occupational histories addressed length of time in farm work, other states where participants had worked on farms, and nonagricultural jobs in the last year. Geographic questions asked where participants had attended school, the places they considered to be their home communities, how many years of farm work they had done in

Michigan, and other states where they had done farm work in the last year. In addition, each interviewer completed a list of questions including gender, ethnicity, and the study participant’s choice of language for the questionnaire (English or Spanish).

Drawing the Sample. The survey involved oral administration of the questionnaire to farm labor camp residents who were at least 18 years old. Migrant farmworkers can be a difficult population from which to draw a sample, particularly where workers move several times during each year’s growing season. Regions of Michigan vary in cropping patterns, and farmworkers often move among them in the attempt to sustain steady employment until they move southward for the winter. Drawing a random sample for a study of this nature is difficult for several reasons; the population of farm labor camps is in constant flux depending on a series of unpredictable factors, especially changes in the weather that determine the timing and amount of work in the fields and orchards. Other factors include: public policy changes affecting living conditions in farm labor camps and requiring outlays by farmers (farmers respond by complying or not complying, but trying to avoid any penalty, in which case their state license may be threatened); changes in policies governing food stamps; aid to low-income children; state and federal medical care services; and other publicly provided benefits that enhance workers’ low standard of living, and technological changes (diminishing the need for field workers). These factors, and others, shape the timing and numbers of people arriving to live in any specific farm labor camp. Farmworkers tend to return to camps where they have done well in the past, but the residents of any one camp cannot be predicted on a yearly, monthly, or weekly basis. Moreover, there is no list of farmworkers in the state and the available list of licensed farm labor camps does not include an up-to-date roster of living quarters. All of these obstacles can be overcome to construct a random sample, but the expense would be prohibitive. In view of these problems, an opportunity sample was drawn in farm labor camps in 12 counties in the central region of the southern peninsula of Michigan. The region provided a good sampling of different kinds of farms according to size and crop, although it is not statistically representative.

We used a list of migrant labor camps compiled by the Michigan Department of Social Services the previous year as a basis for planning routes for interviewing. Research teams could also stop and conduct interviews at any other camp they passed on the road. Interviewers visited as many large camps in the region as possible and

also included some small camps for balance. Once the interviewers arrived camps, they interviewed all adults (18 years of age and over) who willingly participated in the study. The final sample is from 44 farm labor camps in 12 counties, with crops reflecting the state's variety of hand-picked fruits and vegetables, greenhouse plants, and Christmas trees. There is no apparent difference in the characteristics of the people in this sample and those in a 1995 study carried out with the similar methods.

The questionnaires were administered from July 30 through Sept. 11, 1997, to 404 residents of farm labor camps. Of that number, 350 survey participants stated that they were not specialized in farm work that required formal training (i.e., they were not pesticide handlers, who normally take a training course and are required to pass a test to obtain state certification; by implication, they are better educated about pesticide safety than most other farm workers). The present study analyzed data from the 350 survey participants.

Interviewing. Interviewers were trained by going through two versions of pesticide safety training (a video and a flip chart with narration) and discussing its history and aims. Then they reviewed the questionnaire, the goal of each question, and possible pitfalls. The survey began with six interviewers, four of whom had worked an earlier survey. A second training session was held two weeks later for nine more interviewers who then worked on teams combining experienced and inexperienced people. All interviewers were bilingual in English and Spanish, most of them female graduate students at MSU.

Teams of two to five interviewers visited farm labor camps in an expanding radius from their home bases (one in Lansing and the other in Hart, Mich.). Interviews were carried out in the labor camps after the residents had returned from the fields, beginning about 6 p.m. and continuing until about 9 p.m., depending on the size of the camp and availability of people to interview. Upon arriving at a camp, team members would divide up to approach each dwelling (house, trailer, or apartment) to ask for interviews. The protocol began with explaining the study, conversing a little to establish rapport and develop clear communication, and asking for human subjects' consent. Then the interviewers followed the questionnaire, sometimes pausing for light conversation if the participant had tired or become bored. At the end of the interview, participants were given \$5 as a token of appreciation for their cooperation. The amount was not advertised in advance and was designed to be low enough to avoid overcoming substantial hesitation on the part of

any participant. Most camp residents participated graciously in the survey, even though interviews usually occurred at the end of a work day when they had returned from the fields, tired and ready to rest.

Limitations of the Study. Since these interviews were conducted face-to-face, the information gathered is of a higher quality than if the surveys had been conducted by phone or written. There are a few limitations that should be noted, however. First, the sample was not random; however, there appears to be no evidence of bias. The questions did not include as much information about families and household composition as we would have liked for the purposes of this paper. However, questions related to employment proved useful. We have confidence that the data, though sparse, were provided by participants in a forthright manner. An ethnographic study would complement this work further.

Measures — Survey Questions and Variables Analyzed. Questions analyzed in this paper concern employment, household, geography, and demographics, and the statistical analysis dealt with the relevant items from the questionnaire. Interviewers asked whether migrants had worked at jobs other than farm work and what those jobs were; what family members lived in their households at the camp; in what other states they had worked; what place they considered home; and, where they attended school. We also obtained basic demographic information such as age, gender, ethnicity, language preference, and the last grade they had entered in school.

The survey asked what places the workers called home. A few people named several places and a few others said "none." It is not known whether workers defined "home" as the place where they grew up and planned to live again in the future, or whether they were using that place as a home base at the time of the survey. In most cases, a worker was probably returning to a place designated as home annually, but was not necessarily spending much time there. Many had no house in any location, their main property being the cars that they used for interstate travel. The survey did not ask more specific questions about workers' home bases because it was important to building rapport with respondents to avoid the appearance of eliciting information relevant to the U.S. Immigration and Naturalization Service, the agency in charge of deporting immigrants who lack documents for working in the United States. People who reside in agricultural labor camps fear deportation, whether or not they are U.S.-born or legal residents; thus it was important for the establishment of rapport to avoid eliciting any informa-

tion that could be construed as prying about legal status. In fact, the interviewers had the impression that most respondents were legal members of the work force.

In the analysis, migrants were sorted into the two migrant streams that go to Michigan — the Texas-Michigan and the Florida-Michigan streams — on the basis of states where they had done farmwork. Someone who had worked in Texas or Florida was categorized as a member of that stream; in other cases, stream membership was assigned on the basis of selection criteria.¹ Anyone who worked in both Texas and Florida was assigned membership according to the stream in which they had worked in the most states. Some (n=26) could not be categorized. This inability to classify some into a migrant stream is consistent with Martin's report that migration of farmworkers "is a much more complex, unpatterned, and unpredictable phenomenon" than once thought (Martin, 1988 as cited in Rochín, 1995:293). In addition, some farmworkers have settled and do not migrate anymore.

In Michigan, counties where the survey was conducted formed a swath cutting across the lower half of the lower peninsula from the northwest to the southeast: Mason (three farmworkers), Oceana (112), Muskegon (1), Ottawa (44), Kent (35), Montcalm (9), Ionia (11), Clinton (18), Ingham (42), Livingston (36), Washtenaw (35), and Oakland (4). These counties belonged to five of nine Michigan agricultural districts (Rochín and Siles, 1994) — *West Central* (Mason, Muskegon, Oceana), *South West* (Kent and Ottawa), *South Central* (Clinton, Ingham, and Ionia), *Central* (Montcalm), and *South East* (Oakland, Washtenaw, and Livingston).

Households were classified into four distinct groups through cluster analysis. This technique sorts individuals into groups according to their scores on a set of variables. In this case, individuals were sorted as to whether they were traveling with various family members: parents, siblings, children, spouses. The analysis produced four clear clusters based on household members in addition to each respondent: 1) *Family of Procreation*, including one or two generations, with spouse, children, or both (n = 114), 2) *Family of Origin*, including one or two generations with respondents' parents, siblings, or both (n = 68), 3) *Extended Family*, including at least two generations and combining members of the respondents' families of procreation and origin including various combinations of spouse, children, parents, and siblings (n=92), and 4) *Those with No Close Relatives*, including only more distantly related kin or no relatives at all (n = 76).

Featherman's socioeconomic index of occupational status (Featherman and Stevens, 1982) was used to classify jobs outside of agriculture. Featherman's index is a revision of an earlier socioeconomic index that was constructed to indicate prestige scores for various census occupational titles. This earlier index compiled both educational and income characteristics. The particular scale used for this study of migrant farmworkers was the MSEI3 because it "differentiates most clearly among the major occupational groups, particularly those at the bottom of the socioeconomic distribution" (Featherman and Stevens, 1982:93). Its scores range from 2.59 to 95.89.

Analysis. The statistical analysis examined gender differences on means, rank orders, or proportions, as appropriate to the data. These analyses used t-tests, chi square tests, or Mann-Whitney U tests, depending on the level of measurement and distribution of the data. Also the analysis examined interactions between gender and other variables of interest. Chi-square tests were used here. A level of $p \leq .05$ is defined as statistically significant in the analyses.

Two types of post hoc tests were performed. Partitioning of chi square was used when collapsing of subgroups was appropriate, e.g., when comparing more than two levels of job status. When collapsing was not appropriate, e.g., when comparing households, a post hoc test for chi square of equality of proportion was performed (Marascuilo and McSweeney, 1977).

Lastly, this analysis identified household groups through cluster analysis — Ward's method using binary squared Euclidean distance. This statistical method is appropriate for dichotomous data and is commonly used in the social sciences (Aldenderfer and Blashfield, 1984).

Findings

Overview. Table 1 shows the variables in this analysis and the strength of differences between women and men. The first column shows characteristics of the entire sample. We present these findings first, then deal with gender differences in those variables, and finally take a close look at the gendered nature of jobs and their status. Generally, women in the migrant stream are at least on a par with men regarding work in and outside agriculture in terms of the measures used in this study. Women had significantly more education, greater preference for English over Spanish, and stronger ties to the United States in general. Women had worked in agriculture for more years

Table 1. Description of Participants in the Study

<i>Variable</i>	<i>Percentage or Mean Standard Deviation</i>			<i>Comparative Statistic^a</i>
	<i>All Participants N=350</i>	<i>Women n=138</i>	<i>Men=212</i>	
<i>General characteristics:</i>				
Ethnicity: Latino/a	99.4%			
Gender		39.4%	60.6%	
Age (years)	31.7 (11.4)	32.72	31.01	t = -1.37
Education (last grade entered in school)	7.5 (3.5)	7.97	7.17	t = -2.11*
Language of questionnaire: Spanish	86.6%	76.1%	93.4%	$\chi^2 = 21.54^*$
Home is U.S.	68.9%	91.2%	54.7%	$\chi^2 = 51.95^*$
<i>Household study participant is living with:</i>				
Any relative	78.3%			
Family of Origin - Parents and/or siblings	19.4%	8.7%	26.4%	
No close relatives	21.7%	2.2%	34.4%	
Extended - Children, spouse, siblings, and parents	26.3%	42.8%	15.6%	
Procreating Family - Spouse and/or children only	32.6%	46.4%	23.6%	
<i>Migrant Stream:</i>				
<i>In the last year, worked on farms in:</i>				
Florida	32.9%	22.8%	39.3%	$\chi^2 = 10.26^*$
Texas	29.1%	32.4%	27.0%	
<i>Categorized as member of migrant stream:</i>				
	$\chi^2 = 16.0^*$			
Florida-Michigan	33.4%	24.6%	39.2%	
Texas-Michigan	26.6%	31.2%	23.6%	
Interstate migrant but unclear pattern	7.4%	3.6%	9.9%	
Not an interstate migrant	32.6%	40.6%	27.4%	
<i>Work Variable/Main job is hand labor in the fields:</i>				
Overall	85.4%	82.6%	87.3%	
At current farm	93.1%	92.0%	93.9%	
Years at work on farms	9.1 (9.1)	9.68	8.67	t = -1.00
Years at work on Michigan farms	5.4 (6.7)	6.99	4.44	t = -3.49*
Worked in other states	66.8%	57.7%	72.6%	$\chi^2 = 8.41^*$
Total number of states worked	2.5 (1.5)	2.17	2.65	t = 2.87*
Work outside agriculture in past year	38.1%	42.3%	35.4%	$\chi^2 = 1.71$
<i>*Significant at the .05 level or less</i>				

in Michigan, but in fewer other states compared with men. The percentage of women working in nonagricultural jobs was statistically equal to that of men, and women also had higher status jobs on average, although all jobs of study participants were low paying.

Camp Residents. The labor camp residents who participated in the study were nearly all Latino, and on average, 32 years of age with a primary school education. Educational levels varied widely, however, with a range from 0 (never having started formal schooling) to 17 years. Most survey participants preferred to deal with the questionnaire in Spanish rather than English, but observations by interviewers were that some camp residents did not speak or understand Spanish.

Women comprised 39% of the sample. Most people (78.3%) lived in the labor camps with members of their extended family. More than half of the respondents (58.9%) belonged to households comprised of family groups consisting of spouse, children and in some cases parents (Table 1). Only 21.7% were with no close relative and 19.4% lived with parents and/or siblings. In addition to the cultural importance of being with family members, there are practical reasons for family members to travel together to labor camps. When people drive to Michigan, they often travel in family caravans of several cars, allowing them to deal with any problems on the road more easily than if they are dependent on only one vehicle. In addition, a number of families own no home and prefer to stay together rather than risk separating, with the possibility of being unable to find one another again. Some farmworkers have houses, or relatives with houses, in the Rio Grande Valley in Texas while many have none.

Nearly 70% (69.1%) of camp residents considered the location of their home to be somewhere in the United States, and many had worked on farms in Florida (32.9%) or Texas (29.1%) in the past year. Two-thirds had done farm work in states other than Michigan and they had worked in 2.5 states, on average. Survey participants had done farm work for 9.1 years, on average, with 5.4 years of work in Michigan. Those who had worked outside agriculture in the past year accounted for 38.1% of the survey participants.

Gender Differences. There were significant differences between women and men on the number of years of education, language preference (measured as language preferred for the questionnaire), considering the U.S. as home, years worked on Michigan farms, whether they worked in other states, number of other states in which respondents had worked, and household composition. Women had significantly more education than men,

although the difference between means is less than one year of school. On average, the last grade women entered was the eighth grade (8.0) and the last grade men entered was the seventh grade (7.2) ($t = -2.11, p = .04$). Fewer women (76.1%) than men (93.4%) preferred Spanish as the language of the questionnaire ($\chi^2 = 21.54, p = .001$). Women thus may have had an edge in the job market with somewhat more education on average and more comfort in using English than men.

More women (91.2%) than men (54.7%) considered the U.S. their home ($\chi^2 = 51.95, p = .001$). Nearly all women lived in households with relatives; only 2.2% did not compared with 34.4% of men. Furthermore, 89.2% of women had positions in households as wives or mothers, suggesting that they would have substantial domestic responsibilities, perhaps tending to constrain their participation in the job market (a tendency not borne out by this study). There was a statistically significant difference in household type between women and men ($\chi^2 = 90.41, p = .001$). More women than men traveled with extended families (42.8% vs. 15.6%), and more women than men traveled with spouse and/or children (46.4% vs. 23.6%). Fewer women than men traveled with parents and/or siblings (8.7% vs. 26.4%) and with no close relatives (2.2% vs. 34.4%). Post hoc tests showed that women were less likely to travel with no close relatives (2.2%) compared to extended families (42.8%) or with spouse and/or children (46.4%). Also, post hoc tests showed that men were more likely to travel with parents and/or siblings (26.4%) than in extended families (15.6%) or with spouse and/or children (23.6%).

Regarding farm work, women had worked a significantly greater number of years in Michigan than had men. Women worked more years on Michigan farms than men (7.0 vs. 4.4, respectively) ($t = -3.49, p = .001$). Fewer women (57.7%) than men (72.6%) worked on farms in states other than Michigan ($\chi^2 = 8.41, p = .004$). Also, women worked in fewer states other than Michigan compared with men (2.2 vs. 2.7 states) ($t = 2.87, p = .004$). The percentages of women and men who had worked off-farm in the preceding year were not significantly different. Additionally, there were no significant differences between women and men with regard to age and total years worked on farms. Surprisingly, as many as 42% of women had nonagricultural jobs in the past year.

Jobs outside agriculture in previous year. More than one-third of the respondents (38.1%) had a job outside agriculture in the past year. Although 42.3% of women and 35.4% of men had a job outside agriculture in the past year, the difference was not statistically significant ($\chi^2 = 1.71, p = .19$).

Table 2. Types of Jobs, by Gender

MSEI3	DESCRIPTION	Code	Women	Men	Total
<i>Cleaning Services</i>					
5.89	Vehicle washers and equipment cleaners	Objects	0	4	4
6.16	Cleaners and charwomen	Objects	0	2	2
7.6	Chambermaids and maids, except private household	Objects	3	0	3
7.72	Janitors and sextons	Objects	1	0	1
Subtotal			4	6	10
<i>Personal Service Workers</i>					
4.39	Child care workers, private household	People	9	0	9
4.81	Maids and servants, private household	People	1	0	1
11.36	Dressmakers and seamstresses, except factory	People	2	0	2
21.41	Hairdressers and cosmetologists	People	1	0	1
Subtotal			13	0	13
<i>Food Related</i>					
6.31	Produce graders and packers, except factory and farm	Objects	17	17	34
6.95	Garbage collectors	Objects	0	1	1
8.02	Gardeners and groundskeepers, exc. Farm	Objects	0	1	1
9.48	Bottling and canning operatives	Objects	0	1	1
11.27	Meat cutters and butchers, manufacturing	Objects	0	6	6
Subtotal			17	26	43
<i>Food Service Workers</i>					
6.89	Busboys	Objects	0	1	1
8.21	Dishwashers	Objects	0	2	2
9.68	Foods service worker, n.e.c., except private household	Objects	1	1	2
10.43	Cooks, except private household	Objects	2	1	3
11.16	Bakers	Objects	2	0	2
15.42	Waiters	People	1	2	3
Subtotal			6	7	13
<i>Manufacturing</i>					
7.28	Packers and wrappers, except meat and produce	Objects	1	2	3
7.28	Packers and wrappers, except meat and produce	Objects	1	0	1
8.8	Cutting operatives, n.e.c.	Objects	0	1	1
8.86	Solderers	Objects	0	1	1
9.96	Assemblers	Objects	1	0	1
10.57	Machine operatives, not specified	Objects	2	5	7
11.55	Warehousemen, n.e.c.	Objects	3	8	11
19.14	Checkers, examiners, and inspectors manufacturing	Objects	1	1	2
25.47	Inspectors, n.e.c.	Objects	0	1	1
Subtotal			9	19	28
<i>Building/Construction</i>					
7.32	Lumbermen, raftsmen, and woodchoppers	Objects	0	2	2
7.93	Construction laborers, exc. Carpenters' helpers	Objects	0	2	2
10.59	Roofers and slaters	Objects	0	1	1
11.28	Painters, construction and maintenance	Objects	2	2	4
14.82	Brickmasons and stonemasons, apprentices	Objects	0	1	1
14.87	Carpenters	Objects	0	4	4
15.86	Brickmasons and stonemasons	Objects	0	4	4
Subtotal			0	16	16
<i>Transportation Related</i>					
12.06	Automobile mechanics	Objects	0	3	3
13.28	Truck drivers	Objects	0	2	2
13.78	Automobile body repairmen	Objects	0	1	1
Subtotal			0	6	6
<i>Sales and Office Workers</i>					
9.05	Stock handlers	Objects	0	1	1
19.26	Cashiers	People	2	0	2
22.55	File clerks	People	1	0	1
23.55	Counter clerks, except food	People	2	0	2
24.9	Sales clerks, retail trade	People	0	2	2
37.78	Bookkeepers	People	1	0	1
44.25	Secretaries, n.e.c.	People	1	0	1
Subtotal			7	3	10
<i>Health and School Workers</i>					
17.82	Child care workers, exc. private household	People	3	0	3
21.16	Health aides, exc. Nursing	People	2	0	2
29.24	Health trainees	People	1	0	1
37.2	Teacher aides, exc. School monitors	People	3	0	3
48.75	Pre-kindergarten and kindergarten teachers	People	1	0	1
Subtotal			10	0	10
TOTAL			66	83	149

Work outside agriculture did not relate to education for women, but did relate to education for men. For women, the likelihood of jobs outside agriculture was 42% regardless of level of education. For men, though, work outside agriculture was related to education. Among men who had a primary school education or less, only 29.3% had jobs outside agriculture. Among men who entered school beyond the seventh grade, 43.2% had jobs outside agriculture in the previous year ($c^2 = 4.36, p = .04$). This achievement of entering the eighth grade or better equalized men to women, for whom the likelihood of jobs outside agriculture was 42% across all educational levels.

Additionally, a higher proportion of migrants with a U.S. education had jobs outside agriculture (48.9%) than did those educated outside the United States ($c^2 = 5.94, p = .01$). There was no significant difference between women and men, however, in the relationship between these variables.

There were interesting gender differences related to having had jobs outside agriculture in the previous year. For women, having had jobs outside agriculture in the previous year was positively correlated with the number of states in which they had worked ($r = .19, p = .03$) and, at a trend level, the years worked in farm labor ($r = .17, p = .05$; two-tailed tests of significance). However, these relationships were not statistically significant for men.

Having a job outside agriculture in the past year was not related to membership in the different migrant streams, but was related to having worked in Texas and Florida. Having jobs outside agriculture in the last year was not related to migrant stream ($c^2 = 2.54, p = .47$). If women had worked in Texas in the past year, though, they were significantly more likely to have had a job outside agriculture in the past year (54.5%) than if they had not worked in Texas ($c^2 = 4.06, p = .04$); this relationship was not statistically significant for men. If men had worked in Florida in the past year, they were significantly more likely to have a different job in past year (26.5% than if they had not worked in Florida ($c^2 = 4.41, p = .04$).

The place considered home was not significantly related to having had a job outside agriculture in the previous year. However, gender did interact with home location and other jobs. For women who considered their home to be outside of the U.S., work outside agriculture was less likely. In contrast, it was more likely for men who considered their home to be outside the U.S. For women, 45.6% who considered their home in the U.S. had jobs outside agriculture, compared with only 9.1% who did not consider the U.S. their home ($c^2 = 5.51, p =$

.02). For men, only 29.6% who considered their home in the U.S. had jobs outside agriculture, compared with 42.2% who did not consider the U.S. their home ($c^2 = 3.55, p = .06$).

In this sample, language preference was not significantly related to having had a job outside agriculture in the previous year. Household composition was not related to having had a job other than migrant farm work either. Additionally, there was no significant difference between the genders relative to household composition and having had a job outside agriculture in the previous year.

Types of jobs outside agriculture. Using Featherman's scale (1982), examination of the types of jobs other than farm work revealed a preponderance of fairly low status jobs. The median score was 9.6 and the mean score was 11.3 causing scores to be skewed right. The standard deviation was 7.4 while the scores ranged as low as 4.39 and extended no higher than 48.75. Examination of types of jobs outside agriculture revealed gender differences. The general pattern was that women tended to report jobs involving people whereas men tended to have jobs involving objects. Women tended to be maids, childcare workers, cooks, bakers, hairdressers, teacher aids, and kindergarten teachers; while men tended to be produce packers, garbage collectors, lumbermen, construction laborers, dish washers, machine operatives, painters, warehousemen, auto mechanics, drivers, and carpenters. When women were involved with objects in jobs as cooks or bakers, the jobs were typical of a female home role and associated with nurturing people as noted by Chavira-Prado (1992) in Illinois.

**Table 3. States of Two Migrant Streams:
*Texas and Florida***

Texas Stream (n = 93)	Florida Stream (n = 117)
Texas	Florida
Oklahoma	Georgia
Arkansas	S. Carolina
Missouri	N. Carolina
New Mexico	Virginia
Colorado	W. Virginia
Iowa	Tennessee
Minnesota	Kentucky
Wisconsin	Ohio
Illinois	Michigan
Indiana	
Michigan	

The types of jobs outside agriculture were all low in status on the scale. This analysis examines them in three groups (group 1: <10; group 2:10-15; and group 3:>15). Featherman status levels differed significantly by gender ($c^2 = 15.71$, $p = .001$). Partition of chi square revealed a higher proportion of women in jobs with higher status (group 3) than in groups 1 and 2 combined ($c^2 = 10.75$, $p = .001$).

Household Groups. There was a statistically significant difference among the four household types regarding whether migrants considered the U.S. to be their home ($c^2 = 115.5$, $p = .001$). A post hoc test for chi square of equality of proportion was performed (Marascuilo and McSweeney, 1977). All types were statistically distinct except two pairs. Migrants living in households with their extended families were not different from those living with families of procreation (with spouse, children, or both); and migrants in families of origin (with parents, siblings, or both) were not different from those with no close relatives. Of those who considered their home the U.S., a higher proportion of migrants lived with extended families (94.6%) and families of procreation (89.2%) than with families of origin (50.8%) or no close relative (29.7%).

There was also a statistically significant difference between respondents' household types and where respondents received their education — U.S. or elsewhere. ($c^2 = 22.18$, $p = .001$). Post hoc tests showed that a higher proportion of migrants living with extended families (38%), families of procreation (29.9%), and families of origin (32.4%), compared to no close relatives (6.8%), received their education in the U.S.

Household type was also related to level of education ($c^2 = 16.78$, $p = .001$). Post hoc tests showed that a higher proportion of migrants in extended families (60.9%) attended school through eighth grade or higher than migrants with spouse and/or children (36.8%) or no close relatives (38.7%). No other household types were significantly different from one another.

Household types differed between the two migrant streams ($c^2 = 28.39$, $p = .001$). Post hoc tests showed a higher proportion of those migrants who traveled with no close relatives (76.0%) than those with extended family (28.8%) or family of procreation (52.1%) came from the Florida stream. Additionally, a higher proportion of migrants with parents and/or siblings (73%) than extended family migrants (28.8%) came from the Florida stream.

Geography and Migrant Stream

Home. Of the 342 who identified a place that they considered their home, 241 (70.5%) considered their home in the United States and 101 (29.5%) considered their home outside the U.S. By gender, 92.0% of women considered their home to be in the U.S. whereas only 56.1% of men considered their home in the U.S. ($c^2 = 50.78$, $p = .001$). There was a statistically significant difference among household types in regard to whether respondents considered the U.S. their home — 94.6% of those living in a extended family household, 89.2% of those living with their family of procreation, 50.8% of those living with their family of origin, and 29.7% of those without a close relative considered the U.S. their home ($c^2 = 115.50$, $p = .001$). (See Table 3). A higher proportion of families with children considered the U.S. their home (91.0%) compared to families with no children (55.2%) ($c^2 = 48.74$, $p = .001$).

Education. There were also statistically significant differences related to education. A higher proportion of migrant workers who had entered the eighth grade and beyond considered their home to be the U.S. (78%) compared to those who had not (63.5%) ($c^2 = 8.70$, $p = .003$). Similarly, a higher proportion of workers who went to school in the U.S. considered the U.S. their home (98.9%) compared to 59.9% of those who did not attend school in the U.S. ($c^2 = 49.39$, $p = .001$).

<i>Household Groups</i>	<i>Family of Origin</i>	<i>No Close Relatives</i>	<i>Extended Family</i>	<i>Spouse and/or Children</i>
Percent considered the U.S. home	50.8	29.7	94.6	89.2
Percent educated in the U.S.	32.4	6.8	38.0	29.9
Percent entering above 7th grade	57.4	38.7	60.9	36.8
Percent in the Florida migrant stream	73.0	76.0	28.8	52.1

**Table 5. Home Location
U.S. or Not U.S.**

<i>Home Location</i>	<i>U.S. n = 241</i>	<i>Not U.S. n = 101</i>
Percent considered home	70.5	29.5
Percent of families with children	91.0	8.0
Percent of families with no children	55.2	44.8
Percent in 8th grade and above	78.0	22.0
Percent below 8th grade	63.5	26.5
Percent who went to school in U.S.	98.9	1.1
Percent who did not attend U.S.school	55.9	44.1

Michigan. Of the 314 workers who had worked on farms in previous years, 274 had done so in Michigan. A higher proportion of women (90.6%) had worked on Michigan farms in previous years, compared to 70.3% of men ($c^2 = 20.26$, $p = .001$). Also, a higher proportion of people living in households with their children had worked on Michigan farms in previous years (91.1%), compared to those living in households with no children (71.0%) ($c^2 = 19.74$, $p = .001$). A higher proportion of migrants who had worked in other states also had worked on Michigan farms in previous years (82.8%) compared to 69% of those who had not worked in other states ($c^2 = 8.74$, $p = .003$). And a higher proportion of migrants who considered the U.S. their home worked in Michigan in previous years (88.0%) compared to those who did not consider the U.S. their home (55.4%) ($c^2 = 44.39$, $p = .001$). There was also a statistically significant difference with regard to location of schooling and work in Michigan. A higher proportion of those educated in the U.S.

**Table 6. Worked on Michigan Farms
in Previous Year**

<i>n = 274</i>	<i>Percent</i>
Percent of women	90.6
Percent of men	70.3
Percent of households with children	91.1
Percent of households with no children	71.0
Percent who worked in other states	82.8
Percent who had not worked in other states	69.0
Percent who considered U.S. home	88.0
Percent who did not consider U.S. home	55.4
Percent educated in U.S.	93.6
Percent not educated in U.S.	72.1

had worked in Michigan in previous years (93.6%) compared to 72.1% of those not educated in the U.S. ($c^2 = 18.43$, $p = .001$). There was no statistically significant relationship between educational level and having worked in Michigan.

Migrant Stream. By what route migrants reach Michigan is an interesting question and may relate to gender, household types, the place considered home, where schooling took place, and employment outside agriculture. Of the 350 migrants in this study, 233 had worked in states other than Michigan. Of these 233 migrants, 210 could be categorized into one of two streams leading to Michigan: 117 from Florida and 93 from Texas. The other 23 migrant farm laborers could not be placed in a clearly discernable stream (plus 3 were missing data). There was no significant effect of migrant stream on jobs outside agriculture or their status.

**Table 7. Migrant Streams
Florida or Texas**

	<i>Florida n=117</i>	<i>Texas n=93</i>	<i>Not interstate n=114</i>	<i>Not categorized n=26</i>
Mean age	31.0	35.2	29.4	31.7
Percent of women	24.6	31.2	40.6	3.6
Percent of men	39.2	23.6	27.4	9.8
Percent considered home in U.S.	54.5	89.1	72.8	61.5
Percent did not consider home in U.S.	45.5	10.9	27.2	38.5
Percent educated in U.S.	18.4	34.8	31.9	24.0
Percent not educated in U.S.	81.6	65.2	68.1	76.0
Percent entered grade 8 and above	34.5	50.5	60.5	38.5
Percent entered below 8th grade	65.5	49.5	39.5	61.5

There was a statistically significant difference in age between the migrant streams. The mean age for the Florida migrant stream was 31.09 (standard deviation, 11.87), while the mean age of the Texas migrant stream was 35.23 (standard deviation, 11.21) ($t = -2.58, p = .01$). Additionally, a lower proportion of women (24.6%) than men (39.2%) came from the Florida migrant stream ($\chi^2 = 16.00, p = .001$). When examining the mean age of each migrant stream by gender, there was a significant difference in mean age for men by migrant stream ($t = -2.446, p = .016$) but not for women. For men, the mean age of the Florida stream was 29.82 and the mean age of the Texas stream was 34.98. For women, the mean ages were 34.21 and 35.51, respectively.

There was a statistically significant difference between the migrant streams regarding the place called home, country where educated, and level of education. The Texas stream had a higher proportion of migrants (89.1%) than the Florida stream (54.5%) who considered their home to be in the U.S. ($\chi^2 = 30.09, p = .001$). Additionally, the Texas stream had a higher proportion of migrants who were educated in the U.S. (34.8%) than the Florida stream (18.4%) ($\chi^2 = 8.33, p = .04$). Also, a higher proportion of the Texas stream (50.5%) entered the eighth and higher grades compared with the Florida stream (34.5) ($\chi^2 = 16.83, p = .001$).

There was a statistically significant difference between migrant streams in regard to language. A higher proportion of migrants from Florida preferred to answer the questionnaire in Spanish (94.0%), whereas a higher proportion of migrants from Texas preferred to answer in English (19.4%) ($\chi^2 = 9.50, p = .02$).

Discussion and Conclusion

Description of Participants. The study participants resemble other migrant farmworkers described in other research in several aspects (Michigan Commission on Spanish Speaking Affairs 1997; Grieshop, Stiles, and Villanueva 1996; Vaughan 1995; Aponte and Siles 1994; Rochín and Siles 1994; Chavira-Prado 1992; Slesinger 1992; Santos 1989; and Rochín, Santiago, and Dickey 1989). They are mostly Latino, two-thirds are men, they have few years of education, are young, and most prefer to speak Spanish.

Employment Outside Agriculture. While Vaughan found in southern California that the mean number of years spent as a laborer was 12.4, and that 43.8% had worked in jobs outside of agriculture, this study found the mean number of years worked on farms was nine years and 38.1% had a job outside agriculture in the past year.

While language and household type were not related to having a job outside agriculture in the last year, gender, education, home, migrant stream, and location worked were related. More years of education improved the chances for men to get a job outside agriculture, but not for women. A higher proportion of participants with a job outside agriculture in the last year had a U.S. education. Also, if women had worked in Texas and men had worked in Florida in the past year, they were more likely to have had a job outside agriculture in the last year. Work outside agriculture in the past year was also more likely for women who considered their home to be in the U.S. and more likely for men who considered their home to be outside the U.S.

Women were more likely to work in jobs outside agriculture dealing with people, while men were more likely to work in jobs dealing with equipment or objects. A higher proportion of women were in higher status jobs. Jobs with people may be considered higher status in the lower part of the status range, and English language capability was hypothesized to account for the differences between women and men. This study does not support this conclusion, however, since there was no difference in language preference between women and men who had jobs outside agriculture. It should be noted, though, that only 47 (13.4%) of the participants preferred English. Another possible explanation is that women typically work in service industries that deal with people and this holds true for migrant farmworkers, too.

In summary, women were more likely to have jobs outside agriculture if they had worked in Texas the previous year, and considered the U.S. their home; they tended to work in jobs dealing with people. On the other hand, men were more likely to have jobs outside agriculture if they had entered the eighth or a higher grade, worked in Florida the previous year, and considered their home outside of the U.S.

Household Groups. This study reveals some interesting dynamics regarding household groups. Migrants traveling with an extended family group are more likely to consider their home the U.S., to have been educated in the U.S., to have obtained at least a primary school education, and to come from the Texas migrant stream. Migrants traveling with their family of procreation are also more likely to consider their home the U.S., to have been educated in the U.S. and to come from the Texas stream. Migrants traveling with their family of origin (parents and/or siblings) are more likely to have been educated in the U.S. Finally, migrants who travel alone are more likely to come from Florida.

Geography and Migrant Stream. Proportionately more women, migrants traveling with families with children, migrants entering the eighth grade and higher, and migrants schooled in the United States considered their home in the U.S. Proportionately more women, migrants traveling with their own children, workers in other states, migrants who considered their home in the U.S., and migrants who were educated in the U.S. had worked as farmworkers in Michigan in previous years.

Proportionately more women, more migrants who considered their home the United States, migrants educated in the U.S., migrants entering the eighth grade and higher, migrants preferring English and who were older (mean age of 35.2) were from Texas. These findings support findings that the Texas stream consists of extended families with women and children. Proportionately more men were from Florida and the mean age differed by migrant stream for men; in Florida the mean age was 31.0 years, in Texas the mean age was 35.2 years.

Implications for policy and further research. This study implies that additional years of education in the U.S. would improve the chances of male migrant farmworkers in obtaining jobs outside of farm labor. Although not indicated by this study, intuitive sense also indicates that acquisition of the English language would also improve the likelihood of obtaining jobs outside of farm labor. Therefore it seems relevant to migrant farmworkers to provide classes in the United States in speaking English and other topics. Although English is taught in Mexican schools, students rarely gain enough skill to speak and understand it on the job. According to ethnographic observation, adults in the migrant stream who come to Michigan want to learn English, but the school system does not provide teachers who know how to teach English as a Second Language.

Additionally, the jobs outside agriculture that migrant farmworkers obtain are low status and low paying. The jobs that women obtain require more language skill and are higher status jobs that therefore may have greater potential to lead to further employment mobility. This observation supports the argument that language skills and additional education would help migrant farmworkers in obtaining employment mobility.

This study also indicates that extended families and families with children provide a supportive base for migrant farmworkers. Although this study finds no relationship between household type and employment outside agriculture, household type is related to intermediary factors such as a U.S. home and a U.S. education that improve the chances of finding employment outside agriculture. Policy makers need to recognize the large percentage of family-based households in the migrant stream and should therefore consider ways to support family units economically and socially and to prevent educational deficits among migrant children as a result of moving to new schools twice yearly.

Further research on employment mobility is indicated. An intervention to provide education and English language training could be designed to test the viability of these proposals further. Additionally, although not possible to investigate in this study, subjective feelings and comparisons to the referent group are an important influence on employment mobility according to the literature. Perhaps outreach workers who are former migrant farmworkers can serve as mentors and role models for farmworkers. Further research is called for into the viability of this approach to supporting employment mobility.

Endnotes

1. Selection criteria footnote: 1) If someone had worked in more states in one stream than another, he or she was accorded membership in that stream; 2) If the number of states in each stream was the same, and the person had worked in Texas *or* Florida, he or she was accorded membership in the Texas *or* Florida stream on that basis; 3) If the number of states in each stream was the same and the person had worked in both Texas *and* Florida, he or she was not categorized; 4) If the number of states was tied and neither Texas nor Florida were one of the states in which the migrant had worked, a clear majority of states had to be in one or the other of the streams for that stream to be established as his or hers. In a few cases, there was no clear stream because the person had worked in states that fitted no particular pattern, and those cases were not placed in a migratory stream.

References

- Andrade, Sally J. 1982. "Social Science Stereotypes of the Mexican American Woman: Policy Implications for Research." *Hispanic Journal of Behavioral Sciences* 4(2): 223-44.
- Aponte, Robert and Marcelo E. Siles. September, 1994. "Michigan's Hispanics: A Socio-Economic Profile." *Cifras #1*. East Lansing, Mich.: Julian Samora Research Institute.
- Blashfield, Roger K. and Mark S. Aldenderfer. 1984. Cluster Analysis. *Quantitative Applications in the Social Sciences*. Newbury Park, Calif.: Sage.
- Chavez, Leo R. 1988. "Settlers and Sojourners: The Case of Mexicans in the United States." *Human Organization* 47(2): 95-108.
- Chavira-Prado, Alicia. Spring, 1992. "Work, Health, and the Family: Gender Structure and Women's Status in an Undocumented Migrant Population." *Human Organization* 51(1): 53-64.
- Donato, Katharine M. 1993. "Current Trends and Patterns of Female Migration: Evidence From Mexico." *International Migration Review* 27(4): 748-71.
- Featherman, David L. and Gillian Stevens. 1982. "A Revised Socioeconomic Index of Occupational Status: Applications in Analysis of Sex Differences in Attainment." Pp. 83-127 in *Measures of Socioeconomic Status*, Current Issues, Powers, Mary G. (ed.) Boulder, Colo.: Westview Press.
- Grieshop, James I., Martha C. Stiles, and Ninfa Villanueva. Spring, 1996. "Prevention and Resiliency: A Cross Cultural View of Farmworkers' and Farmers' Beliefs About Work Safety." *Human Organization* 55(1): 25-32.
- Guendelman, Sylvia and Auristela Perez-Itriago. 1987. "Migration Tradeoffs: Men's Experiences With Seasonal Lifestyles." *International Migration Review* 21(3): 709-27.
- Haverluk, Terrence. 1997. "The Changing Geography of U.S. Hispanics, 1850-1990." *Journal of Geography* 96(3): 134-45.
- Jasso, Sonia and Maria Mazorra. 1984. "Following the Harvest: The Health Hazards of Migrant and Seasonal Farmworking Women." Pp. 86-99 in *Double Exposure: Women's Health Hazards on the Job and at Home*, Wendy Chavkin (ed.). New York: Monthly Review Press.
- Kossoudji, Sherrie A. and Deborah A. Cobb-Clark. 1996. "Finding Good Opportunities Within Unauthorized Markets: U.S. Occupational Mobility for Male Latino Workers." *International Migration Review* 30(4): 901-24.
- Marascuilo, Leonard A. and Maryellen McSweeney. 1977. *Nonparametric and Distribution-Free Methods for the Social Sciences*. Monterey, Calif.: Brooks/Cole Publishing Company.
- Metz, Brent. 1990. "Anglo Domination of Mexican Migrants in Michigan: The Dynamics of Culture and Law." *Michigan Sociologic Review*, Fall (4): 33-45.
- Michigan Commission on Spanish Speaking Affairs. 1997. "Michigan's Hispanic Community: A Profile." Lansing, Mich.: Department of Civil Rights.
- Millard, A. V., Ojeda, N., Flores, I., Medina, L., DiFonzo, C., Perry, S., and Olsen, L. G. (n.d.). "What do farmworkers know about pesticide safety? A worker protection standard survey of farm employees."
- Rochín, Refugio I. 1995. "Rural, Latinos: Evolving Conditions and Issues." Pp. 286-302 in *The Changing American Countryside: Rural People and Places*, Ed Emery N. Castle. Lawrence, Kan.: University of Kansas.
- Rochín, Refugio I., Anne M. Santiago, and Karla S. Dickey. November, 1989. "Migrant and Seasonal Workers in Michigan's Agriculture: A Study of Their Contributions, Characteristics, Needs, and Services." *Research Report #1*. Michigan State University, East Lansing, Mich.: JSRI.
- Rochín, Refugio I. and Marcelo E. Siles. December, 1994. "Michigan's Farmworkers: A Status Report on Employment and Housing." *Cifras #2*. East Lansing, Mich.: Julian Samora Research Institute.
- Santos, Richard. October, 1989. "Hispanic Workers in the Midwest: A Decade of Economic Contrast 1970-1980." *Working Paper #2*. East Lansing, Mich.: JSRI.

- Segura, Denise A. 1989. "Chicana and Mexican Immigrant Women at Work: The Impact of Class, Race, and Gender on Occupational Mobility." *Gender and Society*. 3(1): 37-52.
- Shimahara, Nobuo K. and Eliane Condon. 1984. "The Migrant Farmworker: A Profile." *Migration Today*. 12(2): 8-15.
- Slesinger, Doris P. Summer 1992. "Health Status and Needs of Migrant Farm Workers in the United States: A Literature Review." *The Journal of Rural Health*. 8(3): 227-34.
- Vaughan, Elaine. July 1995. "The Socioeconomic Context of Exposure and Response to Environmental Risk." *Environment and Behavior*. 27(4): 454-89.
- Zinn, Maxine B. 1981. "Sociological Theory in Emergent Chicano Perspectives." *Pacific Sociological Review*. 24(2): 255-72.