

SOCIAL EXCHANGE PRACTICES AMONG MEXICAN-ORIGIN
WOMEN IN NOGALES, ARIZONA:
PROSPECTS FOR EDUCATION ACQUISITION

Anna Ochoa O'Leary, Ph.D.

Number 31
January 2004

ABSTRACT

This paper summarizes quantitative and qualitative findings from a 1999 study of Mexican-origin households in Nogales, Arizona. An important finding shows that women's educational progress is facilitated with social support, and more importantly, that a household's investment in the education of its members is significantly raised with the increase in the education attainment level of the female head of household. These findings form the premise for arguing that by systematically building on existent cultural frameworks for social support that advance women's educational progress, the chances for educational attainment for all Mexican-origin persons are improved.

ANNA OCHOA O'LEARY is an adjunct faculty member at the MASRC.
Her e-mail address is: olearya@email.arizona.edu

ISSN 0732-7749

MASRC WORKING PAPER SERIES

The goal of the Mexican American Studies & Research Center's Working Paper Series is to disseminate recent research on the Mexican American experience. The Center welcomes papers from the social sciences, public policy fields, and the humanities. Areas of particular interest include economic and political participation of Mexican Americans, health, immigration, and education. The Mexican American Studies & Research Center assumes no responsibility for statements or opinions of contributors to its Working Paper Series.

Manuscripts and inquiries should be addressed to Dr. Antonio L. Estrada,
MASRC Director, in care of the Center.

Working Papers are available directly from the Center for \$3.00.
Arizona residents add 5.6% sales tax.

The MASRC Working Paper Series
© The Arizona Board of Regents

Mexican American Studies & Research Center
César E. Chávez Building, Rm 208
The University of Arizona
Tucson, Arizona 85721-0023
(520) 621-7551 • FAX (520) 621-7966
MASRC website: <http://masrc.arizona.edu/>
E-mail: masrc@email.arizona.edu

Introduction

Research conducted in 1999 in Nogales, Arizona, used qualitative and quantitative methods to investigate how Mexican-origin households deliberated solutions to economic problems, how they perceived education as a way to solve them, and the extent to which investment in women's education played in this process. The research site also provided a laboratory for examining binational and bicultural sets of dilemmas for Mexican-origin women who, in negotiating educational goals, move strategically, albeit hesitantly, across borders structured by economic pressures and cultural expectations. The need to reinforce women's resolve is urgent in light of the results that show that the investment in the education of household members is significantly raised with the increase in the educational attainment of the female head of household. These findings come at a time when policy makers grapple with problems of dwindling economic opportunities, decreased funding for educational programs, and stagnant academic achievement among Latinos (Baker 1996). If we accept the long-held premise that universal education is the basis for achieving social equality, then a focus on women's educational success should drive new approaches for understanding factors that impact the educational advancement of students of Mexican heritage (O'Leary 1999). The present analysis suggests that the formalized and deliberate promotion of social support practices may be the cornerstone of such an approach.

The Study

The study used qualitative and quantitative methods to determine the extent to which Mexican-origin households invest in the education or training of their female members. The research was conducted using a combination of interpretive and materialist approaches. In this way, the details of the ideologies and social life of a particular

community were grounded within the flow of economic change. The negative impact of economic transformations on Mexican-origin populations, such as increased dependency on global markets, underemployment, unemployment, and increased poverty was readily observed in Nogales, Arizona. It thus provided the laboratory for examining familial deliberations over employment, domestic organization, and education, which by most standards might be considered routine were it not for their binational and bicultural dimensions.

One objective of the study was to isolate the social and material factors that influenced a household's ability or willingness to invest in the education of its members, particularly its female members. Ethnographic research of a convenience sample of households provided the information needed to develop a survey instrument that was administered to 297 randomly selected households. Following guidelines for sample selection offered by Bernard (1994:79), 404 households — representing 351 households plus a 15% rate of 53 alternates chosen at the same time to account for refusals and absences — were selected for the quantitative part of the study. This number would provide for a probability sample in which the value for a given element has a 95% probability of representing the value for the true population (4,268 residences). The confidence interval of 95% is not an absolute criterion, but considered standard for estimating the population parameters in most research. The 15 % ratio for refusals and absences proved to be underestimated, resulting in the completion of 297 surveys in a period of four months.

To begin selection of the random sample, a computerized list of Nogales residences was purchased from Cole Publications, a firm that specializes in providing mailing addresses for U.S. cities. The database that Cole Publications provided

included the title and name of resident, street address, and census tract. From this list, a simple systematic random sample was selected. Again, following the procedure suggested by Bernard (1994), the sampling interval was determined by dividing the total number of residences by 404 (the number needed for the sample). The list of residences was then entered at a randomly selected spot, using a random start number from the list of random numbers provided in Bernard's text. This simple random selection procedure was followed when it was determined that there were no significant differences between Nogales' three U.S. Census tracts using the following indicators: educational attainment, income in 1989, poverty status, labor force participation, occupation, and social characteristics.

The questionnaire consisted of 80 questions of both fixed choice and open-ended types. It was developed using the guidelines suggested by Bernard (1994: 268-275) and Fink (1995). For ease in administration, the survey was divided into three major sections. Following suggestions found in Fink and Kosekoff (1996), the flow of questions moved from answering questions dealing with the most familiar to the least familiar. In the field, the administration of a questionnaire took about 20 minutes, depending upon the complexity of household activities, membership, and respondents' interaction with the researcher. A face-to-face survey procedure assured that even informants who would not otherwise have been able to participate in the survey (e.g., the illiterate, blind, or elderly) were included—safe-guarding the random sampling process. This procedure also assured that questions were answered systematically and in full and could be repeated or clarified if needed.

The survey questions were usually answered by at least one adult member of the household, whoever was present in the household at the time. We asked that the person giving the information be over 18 years of age. Women were the prime source of survey informa-

tion with 208 taking part in the survey. The fact that mostly women answered the questions proved fortunate. As the survey process advanced, we found out that they were more likely than men to know the information about other household members. In fact, many men quickly deferred to their wives' knowledge about household matters, especially regarding the activities of other members. This was crucial for minimizing missing information, and most noticeable when attempting to obtain basic demographic information for each of the household members such as birth dates, education levels, and birthplaces.

The sample of households surveyed became the basis for data that was gathered for statistical analysis using the Statistical Package for the Social Sciences (SPSS) program. The factors that were isolated fell into two general categories, material and nonmaterial. All were tested for the strength of their correlation and relationship to the dependent variable "Investment in Education," which was determined by four material indicators: educational fees paid, enrollment in educational program(s), educational purchases made, and an inventory of educational materials within the household. Finally, focused interviews with women from a convenience sample of households fleshed out how they negotiated their educational ambitions and the extent to which their goals were realized. From these interviews, the workings of the various facets of socioeconomic interaction were made intelligible, providing insights about dilemmas borne out of cultural expectations, the integration of employment and domestic responsibilities, and perceptions about the role education plays in this integration.

What follows is a summary of patterns of women's participation in education programs as revealed through the statistical analysis. The patterns that emerged have helped establish an important premise in my argument that women should be placed at the center of a plan by which educational attainment for Mexican-origin popu-

lations can be improved. Secondly, I will use material from my interviews with women that suggests that their chances for attaining educational goals are improved by relying on the existent cultural framework that promotes socially supportive behaviors. The cultural framework that facilitates help-seeking and help-giving practices appeared to be underutilized when applied to education, but it is my contention that emphasizing it can forward women's educational objectives. Indeed, the statistical analysis bears this out. Although when compared to sets of material variables, the relationship of non-material sets of variables (such as "helping with household chores") to "Investment in Education" proved weaker, women seemed to benefit to a greater degree than did men. In other words, with increases in socially supportive behaviors for women, the odds of making significant progress towards educational attainment are improved.

A Brief Tour of Nogales' Education and Training Resources

Meetings with administrators¹ of several local education and training programs in June 1997 provided information on the education and training resources available to Nogales' residents. Many programs were centrally located at the Pierson Educational Complex (PEC), the former Nogales High School on Plum Street, which is close to the central, older part of town and which runs uphill, perpendicular and westward from Nogales' main street, Grand Avenue. Built in 1915, the building's vintage architecture is characteristic of the high schools built during Arizona's post-territorial years. The three-storied stately building greets hurried traffickers that round the bend on Grand. With sobering prominence, the old building remains resolute-and in stark contrast-in the face of the

newer and more efficient prefabricated classrooms that now compete with it for space.

The Pierson Educational Complex (PEC) is the site of Nogales' Santa Cruz Alternative High School (also know as "la Pierson" or "la Alternativa" to local residents). This school was developed to fill the needs of students who were no longer eligible to attend regular high school, either because they are too old or had been expelled. Several programs were in place to fit these needs. For example, Even Start was a program that was federally funded with Title I money. It was essentially a "recovery program" for young mothers who had not graduated from high school. This program focused on teens who needed to complete their high school degree, and combined academic classes with classes on parenting and other "life skills" such as applying for a job. In this program, students worked towards gaining the necessary knowledge to pass the Graduate Equivalency Diploma (GED). The children of these students (infants to preschoolers) attended preschool at the same facility while their parents took classes. Separate from Even Start, but part of the PEC system, was the Mariposa Clinic, which was essentially a wellness center to which parents could take their children for medical checks and immunizations. This was funded by \$77,000 of government money. A coalition of University of Arizona and Arizona State University personnel also provided psychological counseling services to students.

Other adult education programs were available through the PEC, many of which were government funded and free to U.S. residents. These included English as a Second Language (ESL) classes, citizenship classes, pre-GED classes, and the Adult Literacy Program. The PEC was also the site for other educational and training programs. The "2+2" Interactive Video Classroom was an educational program that began in the

¹ Dr. Jerry Booth (Director of the Pierson Educational Complex and Principal of the Santa Cruz Alternative High School), Brian C. Nelson (Program Coordinator of the Nogales-Santa Cruz County Educational Center) and Margarita M. Villegas, (Job Developer, Job Training and Partnership Act).

spring semester of 1997. This program brought together programs from Northern Arizona University (NAU) and Pima Community College (PCC). Televised classes were live and interactive: i.e., students from the remote-access site were able to interact with the instructor, ask questions, listen to others and participate along with on-site students. The program was intended to integrate PCC university-transferable classes with upper-division courses from NAU to enable students to complete a degree. Completing upper-division courses at the University of Arizona was also an option. However, this entailed a commute to Tucson, 60 miles to the north, and additional commitments in terms of time and money. At the time the fieldwork was conducted, NAU and PCC seemed to have capitalized on community interests concentrated in three areas: business, criminal justice, and bilingual education. The interest in business and criminal justice programs had been determined by a survey of community residents. The interest in business reflected the community's concern with the peso devaluation in late 1993 that devastated the downtown retail economy and resulted in a loss of hundreds of jobs. The interest in criminal justice stemmed from the ubiquitous law enforcement activity along the border, including the high-profile presence of the Immigration and Naturalization Service (INS), Drug Enforcement Administration (DEA), and the Border Patrol. The interest in bilingual education also reflected a shortage of qualified bilingual teachers' aides in the schools.

The Community Vocational Training Center was a job training center that was then attempting to recruit individuals interested in certain vocations that would fulfill projected employment needs, especially in the trucking industry (diesel mechanics, drivers), and the building trades (carpentry, plumbing, electrical, and masonry). This program evolved as a response to the implementation of the North American Free Trade Agree-

ment (NAFTA) in 1994, and the prediction of a shortage of manpower to meet projected demands, especially within the transportation industry. A nearby site provided classes aimed at remedying the severe shortage of diesel mechanics to service the transport trucks and the increase in truck traffic since NAFTA. Outreach efforts to encourage females into these more traditional male fields had met with little success. The training of hotel services personnel was another goal in anticipation of a new Holiday Inn that would be constructed to meet the needs of truckers and business personnel that came with increase trade between the U.S. and Mexico.

Information about other education and training programs, while not part of the PEC structure, was readily available through the PEC information desk. For example, the Jobs Training and Partnership Act (JTPA) office was across the street from the PEC. To qualified low-income individuals free training was offered in commercial truck driving, clerical, travel services, and in various medical assistant fields.

The Habitat for Humanity Program, or the "Sweat Equity Home" program, helped low-income families to meet their housing needs. Among the residents of Nogales, this program was strongly associated with sponsorship from Chicanos por la Causa. In this program, community volunteers trained individuals in any one of several building trades, such as carpentry or electrical. After training, they received a Level II Apprentice certificate proving their qualification in the selected trade. The federally-funded program would finance 65 percent of the building materials for a house for qualified applicants. Those earning \$13,000 a year or less had to contribute through their own labor, i.e., "sweat," in the building of a series of homes for others in the program. Each housing unit, then, was built by a community of trainees who would move into their own home after satisfying their obligation to the program.

The Santa Cruz County site of Pima Community College offered about 80 courses each semester. These included ESL courses and televised courses (telecourses) for the homebound. An Associate of Arts or Associates in Applied Science degree could be earned in about 20 different programs at PCC. Degrees would take about two to three years to complete, depending on the availability of classes and the student's ability to participate full time, i.e., enroll for a minimum of 12 credits per semester. A "basic certificate" in business, administrative support, or translation can be earned in about a year, and PCC also offered self-paced classes, financial aid, counseling, assessment testing, labs, and accelerated weekend classes. Most of the on-site classes were offered in the evenings Monday through Saturday to accommodate the adult working community. Free English as a Second Language (ESL) classes were offered to residents and U.S. citizens.

Patterns of Education Acquisition

The survey of households revealed that the average education level for women over 18 years of age ($N = 408$) was 10.7 years, and the average level for men 18 years of age or over ($N = 338$) was 11.5 years.² A break-down by age groups over 18 showed that younger age groups tend to have more education, and that women have generally less education than men. These figures are shown in Table 1.

Because 18 is an age in which many enter the job market or enter an education program, item 35 of the questionnaire specifically queried the education activity of household members who were 18 and over. This assured the inclusion of activities of other members of the household, such as housewives, who might not necessarily consider themselves students in the conventional sense, but

who might be involved in some educational activity. Excluding those who were 18 and over that were still in high school,³ the different education programs of 174 individuals who were actively participating in some type of educational activity, or who had participated within the last two years, were grouped according to types of activity. The following six categories of educational activity were differentiated by their incremental demands on the participant, in terms to the program's structure, time commitments, and costs.

Table 1. Average Education in Years by Age Group and by Sex

Age Group	Sex	Mean	Std. Deviation
Ages 18 - 30	Female	12.13	2.38
	Male	12.26	2.04
	Total	12.19	2.22
Ages 30 - 50	Female	11.36	3.43
	Male	12.09	3.56
	Total	11.70	3.50
Ages 50 - 65	Female	9.84	4.66
	Male	11.48	4.60
	Total	10.65	4.68
Ages 65 +	Female	7.16	2.64
	Male	7.90	3.84
	Total	7.46	3.17
Total	Female	10.70	3.67
	Male	11.53	3.69
	Total	11.08	3.70

In the least structured category, "Community Education," were educational activities that required the fewest commitments of time and cost from participants. These activities were also the least restrictive in their enrollment criteria. With the exception of a few recreational classes, the majority of the programs in this category were

² Age 18 was chosen because by this age, most students have attained a high school diploma.

³ Usually, students graduate from high school in the spring of their 18th year. However some were found to be over 18 and still enrolled at the public high school. This group was distinguished from other adults who were enrolled in any of the community programs available to non-high school graduates earning their diploma.

Table 2: Participation in Education within the Last Two Years by Education Level and Sex

Education Level	Community Classes	Count	Sex		
			Female	Male	Total
Community Classes	Count	30	9	39	
	% within Education Level	76.9	23.1	100.0	
	% within Sex	25.8	13.2	21.2	
Certification	Count	25	16	41	
	% within Education Level	61.0	39.0	100.0	
	% within Sex	21.6	23.5	22.3	
Vocational Training	Count	7	9	16	
	% within Education Level	43.8	56.3	100.0	
	% within Sex	6.0	13.2	8.7	
Tech Schools	Count	6	1	7	
	% within Education Level	85.7	14.3	100.0	
	% within Sex	5.2	1.5	3.8	
Junior College	Count	26	23	49	
	% within Education Level	53.1	46.9	100.0	
	% within Sex	22.4	33.8	26.6	
University	Count	22	10	32	
	% within Education Level	68.8	31.3	100.0	
	% within Sex	19.0	14.7	17.4	
Total	Count	116	68	184	
	% within Education Level	63.0	37.0	100.0	
	% within Sex	100.0	100.0	100.0	

public-sponsored and free to those who qualified. English classes were the most frequently listed activity in this category, and were offered through different community agencies and public schools. Other activities that in this category were High School Graduate Equivalence Diploma (GED) preparation classes, and to a lesser extent, community service classes and recreational activity classes.

The second most frequently listed educational activity was labeled “Certification,” which was essentially a continuing education process by which individuals maintained and periodically updated their occupational credentials. The most common examples of this activity are continuing medical education courses required of health-care professionals and the in-service training classes for teach-

ers. The structure of this type of educational participation was highly varied, dictated by the profession to which one belonged, and intended to maintain performance standards within the respective fields. The commitment to this on-going educational activity was highly varied, as was the cost to the participants. Some employers might sponsor some courses, and cost to the participant was usually in the form of registration fees or travel expenses.

The “Vocational Training” category included programs where classes or formal instruction were combined with job training or employment. The community’s Job Corp program (via the Job Training and Partnership Act) is a common example of the combined training and workforce experience approach to education. Another example is law enforcement train-

ing. The costs of participating in these programs ranged from none to minimal costs for transportation and materials. Often, the cost of training was reflected in the reduced wages of new employees pending completion of the instruction. In addition to community agencies, some private sector employers also used the on-the-job-training strategy. Walgreen's Drug Stores, for example, provided employment while the trainee earned their credentials as pharmacy technicians. Ford Motor Company also provided an on-the-job certification program for its mechanics.

The next category, "Technical Schools," more formally structured the participant's education. Technical schools offered specialized certification programs, and associate and bachelor degrees. The structuring of the programs reflected the work schedules of the enrollees and was geared towards credentialing them for the job market. While program duration varied according to each program, these schools generally offered students accelerated education programs and job placement or internships in the private sector after completion of the program. At this level of educational structure and commitment, financial cost to the enrollee might be substantial, especially when compared to the programs previously mentioned. But technical schools generally provided financial assistance or facilitated educational loans to meet the costs. The most common of the schools referred to in this category was Chaparral College, which offers programs in office skills, computer technology, accounting and business administration. ITT Technical Institute, Lamson's Business College in Phoenix and Pima Medical Institute were others listed among the Technical School category.

The final two categories of educational activity involved college and university programs. The "Junior College" designation was used to differentiate it from the University category in terms of cost and the time required to complete a degree program. Pima Community College (PCC), Mesa Community College, and Cochise College were

institutions listed among the households surveyed. Unlike Technical Schools, Junior Colleges offered courses that could be transferred to a university program of study and in this way their programs might be nested within the structured requirements for a degree from a university. The Tucson-based PCC provided an extended campus in Nogales, Arizona, for example, offering students the option of earning credits for transfer to a university or associate degrees that would take from two to three years to complete. An associate's degree from PCC required a time commitment of two to three years, and this was generally a longer period when compared to the programs of the technical degree schools that were aimed at working adults. However, to provide educational resources that were responsive to the working community's needs, PCC offered specialized courses and programs for non-degree-seeking students similar to those of the technical degree schools. These programs thus competed with the technical schools, offering flexibility for working adults who were interested in enhancing their job skills or obtaining certification in minimal time. In implementing these latter objectives, many certification programs were offered in several technical fields (such as Finance, Office Specialist or Business Administration) and could be earned in less time than an associate's degree.

The final category, "University," is a category of educational activity that is the most structured and the most obligatory in terms of time and cost. Because the closest university is in the University of Arizona in Tucson, 60 miles away, the arrangements for attending a university involve a greater commitment to a longer program of study, particularly because the minimal requirements for a bachelor's degree generally require four to five years of full-time course work. In addition, a student's time commitment is complicated by a necessary psychological commitment to fulfilling a program of study that adheres to a structure that is imper-

sonal and might appear detached from the situations and concerns of the student's home community. Commitment, in view of the search for meaning in coursework within a longer plan of study in such cases, could be considered more obstructed in this category than in any of the others. In the last two years, two of Arizona's three public universities, Arizona State University and Northern Arizona University have begun to change the emotional distance between university study and community interests by establishing programs in the Nogales' community. These institutions have addressed local needs, in particular, by bringing bilingual certification programs to Nogales teachers. The extension of these programs has made university education not only more accessible and affordable to residents of Nogales, but more meaningful as well.

Using these six categories of educational activity, patterns of educational participation the respondents for the last two years were revealed (Table 2). The most remarkable pattern showed that overall, more women than men had been active in acquiring some form of education, and that women had outnumbered men in all but one of the six categories of educational activity, vocational training. The largest difference between men and women was in the community education category where women outnumbered men nearly three to one. This category also showed the most irregularity in terms of attendance. Many stated that they had been taking English classes "for years," attending only when they had the time. Their greater number within the base level of educational activity may be indicative of efforts to increase educational levels that were low to begin with, especially in English-language skills.

Another remarkable pattern was that nearly double the number of women than men had participated in university-level classes in the last two years. Further probing into the households where members were engaged in this category of activity

showed that of the 22 women listed, 14 were still enrolled. One woman had just finished her degree in criminal justice and three women were no longer attending. Four of the 22 women were teachers working on their master's degrees. Only one of those four women was of Mexican origin. The households in which men were engaged at the university level showed that all ten were still enrolled, and all ten came from Mexican-origin households. The same pattern appeared in the Junior College category, where 14 women out of the 26 who had been participating within the last two years were currently enrolled.

The questionnaire (Question 69) probed into the reasons why respondents stopped attending educational programs. For women, the reasons were varied, and included not having time because of work and family commitments, not having transportation, or not having someone to help watch younger children. The responses implied that education acquisition patterns of women were beset by competing commitments to domestic and family obligations. I turn to this in the following sections, for it is the analysis of social contexts where decisions about education are made that provides the basis for interpreting the obstacles to education for women.

Supportive Practices and Educational Goals

For many Mexican and Mexican American households, the history of chronic economic instability can be used to explain the presence and persistence of supportive practices that facilitate the procurement and distribution of resources. Resources can be of a material nature, such as goods, services, loans, or information. They can also be nonmaterial in nature, such as emotional support or encouragement. Discernable social support patterns of behavior that reproduce the social systems by which resources are informally exchanged have long been accepted as integral to the constellation of cultural traits associated with Mexican

and Mexican American populations (Chavez 1985, Keefe 1980, Selby, Murphy, and Lorenzen 1990). The value placed on social support and the informal exchange of goods, services, and goodwill that these engender become the basis for the relationships that connect individuals and households to each other.

From the responses to questions on the survey, variables reflecting the specific help-seeking and help-giving behaviors between individuals and households were determined. Of particular interest were those activities that women engaged in. These were thought to either hamper educational activities by increasing the demands on women's time, or to facilitate educational activities, by relieving them of these demands. They constituted a range of reciprocal exchange practices that women perform routinely, and the types of support they might expect from others within their social circle. The first group of behaviors, indicator variables grouped under a category labeled "Reliance," represented the social exchange practices upon which households rely to meet their needs. Multiple regression analysis of these variables was used to test how changes in the degree of household reliance affected "Investment in Education." The different variables designed to measure the concept of household reliance were tested for the strength of their correlation coefficients and for their correlation with the dependent variable, Investment in Education. Combinations of the Reliance variables were systematically regressed on Investment in Education to determine the best predictive model. Variables that produced the most change were selected and those that had little impact were eliminated. This process determined that three variables, Help Given (to other households), Frequency of Visits (between households), and Number of Related Households on the Arizona Side of the Border, produced the most parsimonious model for predicting Investment in Edu-

cation. The Reliance variables accounted for about eight percent of the variance in investment for household members. Table 3 presents the standardized and unstandardized regression coefficients and their accompanying t-values for this model of investment. The t-values and F-ratio indicate that although the relationship is not very strong, we can expect a significant increase in Investment in Education with increased dependence on other households.

The impact of the Reliance group of variables was further tested for their relationship to Investment in Men, and Investment in Women. For Investment in Men (N = 58), no significant change was produced from the Reliance variables. For women (N = 90) however, significant change (R-square = .093, $p < .03$) in their investment was detected with increased levels of Reliance. This finding suggested that women account for most of the variance in Investment in Education when Reliance indicators were considered. It further suggested that women, more than men, depended on and benefited most from social support to help them meet their educational goals. The statistical findings were more difficult to discern in the interviews with women, as the following case study shows, suggesting that soliciting support for education as a deliberate strategy may go largely overlooked by women.

Luisa

The vicissitudes of the Gamez family⁴ household had not dampened the hopes and enthusiasm of its matriarch, Luisa. At age 45, she was determined to return to school and earn a teaching degree so that she could surprise her elderly parents. As a young girl, she hoped to become a teacher. After graduating from Nogales High School, however, her mother insisted that she find a job and help support her younger brothers. Luisa's father, an alcoholic, was an inconsistent provider and the

⁴ A pseudonym.

Table 3: Multiple Regression Analysis of Indicators of Household Reliance on Investment in Education for All Household Members

Independent Variables	B	Beta	t	Sig.
Help Given to Other Households	1.839	0.181	2.989	0.003
Frequency of Visits	1.175	0.161	2.692	0.008
Number of Related Households	1.183	0.153	2.498	0.013
R-square = .085				
F (3, 260) = 8.065*				
* $p < .001$				

additional income from Luisa's employment provided much-needed financial relief.

Luisa's husband was from Mexico and had come to work in the U.S. as a young boy for seasonal labor. She joked that it was uncertain whether his decision to stay on this side of the border was based on her presence or the presence of employment:

Mi esposo se vino con un tío de él a trabajar por temporadas, sin papeles. Eso dificultaba más las cosas para encontrar un empleo. Iba y venía hasta que nos conocimos, y no se si le gustó aquí por mí o por Nogales.

During their early years together, Luisa often helped him dig ditches do other arduous jobs. Because he didn't have the legal documentation to work, he had little choice but to accept whatever was available, and they never turned down a job.

However, Luisa was never far from doing what she always longed to do. She worked for several years as a teacher's aide at a local school. She assisted in a special education class with children with Down's Syndrome and other handicaps. About 12 years ago, her husband injured his back while working and was medically disabled, qualifying for benefits from Social Security. He had looked for other jobs that didn't require hard labor but his sixth-grade education in Mexico limited his employment opportunities. For years, the family depended solely on these benefits and Luisa's wages as a teacher's aide. Luisa began her present job—

she is a secretary in a community service agency—as a volunteer, and after a year, she was hired part-time. Her employment became crucial to the support of her family. Her oldest son, Enrique, was 24 years old and had recently married. Although he contributed to the household, he

and his new wife had plans to move away. He had been attending PCC for two years, taking classes that could be applied towards a teaching degree. Now, he was planning to enroll in a computer programming course of study at Chaparral College in Tucson. The program was expected to take about 20 months to complete and financial aid from the college was available. His wife had expressed interest in continuing her education, but because she was not a U.S. citizen, there were questions about her ability to qualify for aid because of recent changes in U.S. law. The current plan was for her to find a job and help her husband attain his educational goals. Luisa and her husband were expected to help the young couple out. Luisa acknowledged that it was in the spirit of family unity that the young couple would be helped in any way, such as helping them pay the rent, or providing transportation to look for work:

Van a ser 20 meses difíciles para ellos porque es mucho trabajo—y para sus familias también, porque son muy unidas. Las dos familias están dispuestas a ayudar a la joven pareja. Les están ayudando con la renta, por ejemplo. Mi hermano vive en Tucson y su esposa ha ofrecido llevar a la nuera a buscar trabajo allá.

Luisa's daughter, Karen, had also just graduated from high school. Luisa and her husband had encouraged their daughter to consider furthering her education, but she was yet undecided. Karen's initial plan was to go to Tucson with her cousin and enroll in PCC to study veterinary medi-

cine, but she had changed her mind—afraid she and her cousin would not get along. She then considered joining the Air Force but, around that time, the sexual harassment scandal at the Air Force Academy became public and again changed her mind. Finally, Karen opted for a course of study in social work at the local PCC. Luisa accompanied her daughter and solicited the financial-aid applications. They found that Karen would qualify for a government Pell Grant and other financial aid, and so could begin classes in the fall semester.

Having resolved the immediate concerns for her two oldest children, Luisa was still pressed to resolve the recent problems of her youngest child, Diego. Diego, who was in his last year of high school, had academic as well as behavioral problems. Luisa's greatest fear was that Diego, who appeared to be influenced by many of his friends who were facing problems at school, would not graduate. In recent years, there had been an increase in gang-related problems in her neighborhood. She had recognized the members of the gangs as childhood friends of Diego, many who she thought showed signs of drug use. She felt that she had been too lenient with her son in the past, and was now taking steps to help him improve his academic performance. She had also become more vigilant of his social activities, which he resented. She attempted to refocus his attention on his education and his responsibility as a member of the family. She was working closely with his teachers and counselors. Lines of communication between school and parent had intensified in the form of weekly monitoring of his school assignments. Every Thursday, a list of assignments was sent home so that she could check on his progress. She reviewed his homework, signed the list of assignments, and returned it to the counselor. It disappointed her to have to take more radical disciplinary steps. She was grateful, however, that more serious problems had not emerged as they had for some of the other boys

who had already experienced serious trouble with the law. With so many other things to do, she had delegated much of the work of monitoring Diego's homework and other activities to her husband, who was at home for most of the day. Seemingly relieved, she added that he had always had a firmer hand with the children than she:

Como mi esposo es mas estricto, yo ya le dejé la responsabilidad. Si mi hijo me pide permiso para ir algún lado, yo lo mando con su papá. 'Ve con él,' le digo, 'si él te deja ir, ve.' Ahora es mi esposo quien decide...quien se hace responsable. Él es el que está al pendiente de que hagan las tareas, de preguntarles como les fue en la escuela, en fin él es quien decide sobre ellos.

In reflection, she commented that as parents, we tend to become lazy when it comes to discipline: "En general somos muy flojos para criar a nuestros hijos..." She saw her job as a parent as beginning when children are born, and ending only when life itself came to an end: "...los papás empiezan de preocuparse cuando los hijos nacen, y dejan de hacerlo cuando nos morimos," and remembered a phrase her mother often used to describe the eternal toil of parenthood: "Si la noche fuera día, descanso no habría." (If nighttime were day, there would be no rest.)

Parenting was only part of what kept her from pursuing her own goals. She wanted to earn an Associates Degree and pursue her dream of becoming a teacher, but her father's health had recently taken a turn for the worse, so she decided to put off her goal and spend time with him. After many years of drinking, her father had developed cirrhosis of the liver and her mother had cancer, which often prevented her from attending to her husband's illness. In addition, Luisa's elderly mother-in-law lived with them, and although she had a pension through social security, these payments were rumored to be in jeopardy with changes in the law that affected retirement benefits to non-U.S. citizens. In spite of her over-

whelming family obligations, Luisa perceived her biggest constraint to be financial, since her household depended on her income: “Mi esposo no tiene recursos para darles educación a nuestros hijos, yo soy la que mantiene la casa.” To her credit, Luisa had managed to earn a certificate in General Studies from PCC two years earlier. She had taken classes locally and when her son commuted to Tucson to take classes that were not available in Nogales, she had accompanied him and attended classes also. She finished with a 4.0 grade point average. She boasted that she was the first in her family to have attended college and her parents were proud of her. Her brothers had been given the opportunity to continue their education, partially through Luisa’s help in supporting them. But they did not complete their studies. In terms of prospects for furthering her education, she remained hopeful that she would earn her teaching degree before her parents die: “A mí me gustaría,” she says, “antes que ellos mueran graduarme y entregarles a mis padres un diploma, o un documento donde diga que yo ya termine mis estudios.”

This case study demonstrates how supportive practices can be a liability for women, rather than an asset because they compete with her efforts to participate in educational programs. Conformably, the logic of the relationship between supportive behaviors and the ability to meet educational goals was also examined by variables representing specific supportive behaviors that women might receive. For this, a scale rating representing how much help with household chores was given women was developed as follows:

- 1 - indicated “no help with chores”
- 2 - indicated that “help was given”
- 3 - indicated the most in terms of a household’s commitment to help--“hiring a housecleaner”

Similarly, a scale for assessing help with childcare was set up:

- 0 - denoted “none needed (no children present)”
- 1 - indicated that “no special arrangement” had been made
- 2 - indicated that “arrangements had to be made”
- 3 - indicated the use of household finances to help pay for child care.

Other social support variables were set up to measure observable behaviors that were specific to helping women with their domestic responsibilities. The values for dichotomous variables (values of 0 or 1) were given to represent whether or not women had access to the household resources (to bank accounts, credit cards, or a vehicle) or had time for studying.

Correlation matrices were generated to determine which variables were the strongest in terms of their relationship to each other, and to the dependent variable, “Investment in Education.” Through the process of elimination, the social support variables that most strongly correlated with the dependent variable were “Help with Childcare” and “Hours Spent Studying.” The combined strength of these two variables suggested that the number of hours spent studying was related to a social organization that provided help with child care that allowed women more time to study. The combination of these two led to a stronger positive educational outcome in terms of an increase in a household’s investment in education. The regression analysis using these two variables produced a positive, significant change in Investment in Education for Women. The R-square of .160 ($p < .01$) indicated further that these two supportive practices specific to women’s needs produced more changes in Investment in Education. The result of the regression analysis suggests that help with childcare is at the heart of educational progress for women. Resolving this issue is exemplified by the following case study of Reyna.

Reyna

Reyna⁵ is a 22-year-old wife and mother of three. She comes from a large family that includes nine siblings, most of whom did not finish high school. She is the fifth eldest child and the fourth eldest female. Reyna herself attended one semester of high school when she decided to drop out because of what she referred to as “personal problems” at home. Her parents’ attempt to impose their beliefs on their children translated into an authoritarianism that Reyna thought unrealistic. She felt that her parents were products of another time, of an upbringing and philosophy that disapproved, and restricted activities she considered typical of adolescents her age. When her parents tried to exert control over her, she rebelled. By age 16, she had dropped out of school and left home and went to live with a sister.

At this point in her life, Reyna’s future did not seem very promising. She worked for a brief period in Tucson, helping a sister in her job at a Farmer’s Insurance Agency. She also married Luis Donaldo, who had also dropped out of high school in the ninth grade. She began having children, first Maritza, who was four at the time of the study, then Luisito a year later. More recently, she had Mario who was eight months old. Then, serendipitously, Reyna came across an opportunity that would help her change things for the better.

One day in 1994, Reyna was visiting her mother, and by chance, a letter addressed to her parents, as public housing residents, caught her eye. The letter was from the Nogales Housing Authority (NHA) and informed potential qualifying households that applications were being accepted for a new housing program. The program was a form of public housing whereby participants contractually agreed to take responsibility for improving their economic situation and ultimately eliminate their dependency on public assistance. By reading the program eligibility guidelines in the letter,

Reyna realized that her parents would not qualify because her mother was medically disabled and her father was retired. Some restrictions were based on legal residency, age, and public assistance category. Also, anyone with a criminal record or history of substance abuse was ineligible to apply. The program sought applicants who were committed to improving their economic situation by participating in the program for five years. Reyna saw an opportunity and applied.

When Reyna agreed to participate in the study, she had just moved into one of the 30 units built for the NHA housing program. Reyna and her family were one of the first families to move into the new colonia. Her neat and tidy duplex sparkled brightly with clean, fresh paint and an aura that comes with dignity and pride in oneself. The contract between NHA and the program participants stipulated that one of the heads of household must work full-time and the other (who may work part-time) must do something about improving the household’s economic situation. By the end of five years, the household must be self-sufficient, i.e., no longer dependent upon public assistance. Self-sufficiency could be attained by improving the household’s employment situation, primarily through the acquisition of skills that could lead to better pay and more stable employment. The NHA program would also help participants with job placement. Anything that helped households attain self-sufficiency could be utilized and was encouraged: learning English, earning a GED diploma, taking college courses or participating in any of various self-help programs that were available.

As the skill level of household members improved, it was anticipated that better-paying jobs would be available to them. In most forms of public assistance housing, the rent paid was determined, or prorated, according to the household’s earnings. Thus, with increased earnings, participants were expected to pay more rent. Under the terms of the new NHA housing contracts,

⁵ A pseudonym.

the difference between the initial rent and the increased rent due when earnings go up were held in trust. After the end of the five years, the total of the monies held in trust for each household would be returned to the household to be used for a down payment on a home. For example, Reyna explained that she now paid \$132 a month for their three-bedroom home. When she finished her GED program and began full-time employment, the rent would increase to \$500 a month, reflecting the increase in the household's earnings. After five years, the monthly difference between the \$132 that Reyna had been paying, and the \$500 due for rent after the increase, would total \$18,680. This money would be returned to Reyna's household and would be applied towards the purchase of a home.

Part of the application process required a statement of goals by the applicant household. When she applied, she had already enrolled in a program at the Pierson Educational Complex to earn her GED. In keeping with the program requirements, she was working part-time, and her husband was working full-time. When asked how they decided who would do what to fulfill the requirements of the contract with the NHA, she said that they both decided that her husband, Luis Donaldo, who was 25 and worked as a grounds-keeper, would be the full-time working spouse. Also, in keeping with the terms of the contract, he committed to helping her with the housework and with the children. He was happy to let Reyna satisfy the requirements for improving the household's skill level through education and had been honest about his disinterest in undertaking some form of continued education for himself.

In addition to the classes that prepared her for her GED examination, Reyna participated in vocational skills training offered by the Even Start program. There, she was given instruction in basic office skills such as typing and filing. The program also provided instruction on childcare. Even Start accommodated the entire family by including day care and preschool services for the chil-

dren of adults taking classes. So when Reyna went to her classes, Maritza and Luisito went with her to attend preschool and day care. Reyna still relied on her mother to help take care of the youngest child, Mario, who was too little to participate in the program. She also depended upon her sister, who had helped her at times by loaning her money. Reyna attended the morning session at Even Start (there were two each day) and would finish in a matter of weeks. She also attended an evening course once a week at Pima Community College to learn to use Microsoft Works, a word-processing program. Using an income tax refund, Reyna had just purchased her own car, which had facilitated her many activities. Before she had her car, her husband would drop her off at a neighbor's, who would take her to the educational complex when it was time for class.

Reyna had not considered any goals beyond her GED, but was considering enrolling in a childcare certification program. Before she dropped out of high school, she never sought or received help from counselors or teachers. Indeed, she particularly remembered teachers as being rude and indifferent toward students. Many teachers publicly humiliated students and did not appear to want to help students. The career aptitude assessment examinations she took through the program at Even Start, however, showed she had a talent for nursing, teaching, or working with people. Any future educational goals had not yet been considered. At this point, Reyna gave the impression that she was happy with her prospects for continued success that were, in part, derived from the support that she had helped create for herself.

Implications for Policy Change and Practice

The interviews conducted with women provide some evidence that socialization patterns emphasizing marriage and motherhood may produce low educational expectations for women, thereby slowing or impeding their educational progress. Us-

ing Luisa Gamez' case to illustrate, it can be argued that women readily support other family members, but may be reluctant to solicit help from others to pursue their own educational goals. An alternative is that women place their education objectives on equal footing with other household objectives, as the case study of Reyna illustrates. If the logic of mutual support holds, the request for support from women should appear as natural as when it is requested by women. The results of the statistical analysis of the social support variables, together with Reyna's interview suggest that gendered patterns of requesting support may be undergoing generational transformation as women negotiate cultural contexts. However, the somewhat inconsistent patterns for resolving dilemmas about education may not be enough to keep pace with the present urgent need to develop systematic solutions to the planning of educational futures.

Given that systems of social support are salient in the organization between and within Mexican-origin households, and maintained over time and geographic space through patterns of social interaction, their presence provides the starting point for instituting change that would stimulate the stagnant levels of educational progress for Mexican-origin populations. By incorporating the social exchange mechanisms already in place, women can capitalize on increased social support for their educational activities, and in so doing, the educational level for the broader Mexican-origin population could rise. Evidence for this argument comes from a multiple regression analysis of how the variable Women's Years of Education (measured in number of years and months for female head of household in the survey) affected Investment in Education (Table 4). This analysis showed that more

years of education for either head of household produced positive changes in the household's average "Investment in Education" value. The number of years of education for women, however, provided for greater, more significant change ($F=43.5$), and was the better model for predicting a household's Investment in Education practices.

This statistical analysis is consistent with the findings from the study of socioeconomic factors and high school graduation rates by Romo and Falbo (1996: 195). Although not discussed, reference is made to results that show students with better educated mothers (or those coming from higher income households) were more likely to graduate than those whose parents had less education and income.

Table 4: Multiple Regression Analysis of Years of Education and Investment in Education

Investment in Education	Beta	R-square	F-ratio	Sig.
Years of Education for Female Heads of Household	.373	.139	(1,270) 43.5	p <.001
Years of Education for Male Heads of Household	.326	.106	(1,222) 26.3	p <.001

In light of this evidence, a programmatic approach to increasing the educational success of women should be considered as a way to increase educational attainment levels of all Mexican-origin persons. Social exchange patterns should be fundamental to this strategy as a way of overcoming obstacles to education. This may be accomplished by the formalized recognition of the value of the informal social exchange patterns commonly available to Mexican-origin populations, particularly women. There are several works that bridge informal cultural processes with the formal education process. Stanton-Salazar (2001) has pointed out the importance of help seeking and social network building in shaping educational outcomes of Latino youth. Social support practices have also been known to promote nonmaterial resources

such as familism that strengthens children's scholastic progress (Israel et al. 2001). Social support can also instill among marginal students a sense of connectedness to the institutional educational setting (Valenzuela and Dornbusch 1994). However, although social support mechanisms have been confirmed as beneficial to the schooling process, as a learning object, it appears to be little explored. Furthermore, Latino populations in many ways today are still encumbered by the politics of modernity that privilege individualism and devalue other cultural "help-seeking" patterns (Nelson-Le Gall 1985).

The irony is that this latter perspective ignores the extensive references to the importance of social exchange behaviors for meliorating economic instability and poverty among Mexican-origin populations. Many multicultural approaches continue to focus on the more visible cultural features like folklore and music. An exhibition of cultural artifacts under the guise of multicultural education distorts meaningful and useful information that comes from lived experiences. It also neglects the idea of culture as processual (González 1995). Thus, many important cultural processes, such as social exchange, which are outside the purview of multicultural education, perhaps following a private-public dichotomy, have yet to be considered as valid subject matter within the framework of multicultural education. It might also be that processes such as social support go unnoticed when the resources being mobilized and the objectives of such mobilizations are perceived as private, perhaps because they take place within the domestic, rather than the public sphere. By blurring dichotomies that isolate a public process (education) from the private (cultural processes like social exchange), the mobilization of resources become both a means and an end by which the cultural other can enhance its opportunities.

The idea that social support is actively created and cannot be assumed would be an important component

in a new approach in promoting the educational advancement of Mexican-origin students. Social support, as a concept could be promoted by making it part of the learning experience—in the Freirian sense, a "cognizable object," as well as part of the educational attainment process (Freire 2000: 128-29). Following innovative educational approaches in which cultural resources are activated for enhanced learning, a "funds of knowledge" approach would access the knowledge and experiences present in the household for teaching. (Moll et al. 1992, Vélez-Ibáñez and Greenberg 1992). The social system exchange process could be the subject of workshops that focus on the intellectual development of adult women learners. The formalized recognition and validation of cultural help-seeking practices would be the first step in the educational practice by which an advantage for women is systematically constructed. It would be a deliberate, conscious act, an "act of cognition," and emancipatory (Freire 2000: 79). Here, the quintessentially Freirian presupposition—that a deepened consciousness of their marginal situation leads people to apprehend their situation as historically and structurally conditioned, and as such, alterable—is axiomatic (Freire 2000). Through conscientization, then, the social support process itself is sanctioned, and systems of support can be consciously and definitively mobilized in support of women's educational activities, to help them realize academic goals, and enhance the educational progress for all Mexican-origin persons.

Works Cited

- Alvarez, Robert R. Jr.
1991. *Familia: Migration and Adaptation in Baja and Alta California, 1800-1975*. University of California Press: Berkeley and Los Angeles.
- Baker, Susan González
1996. "Demographic and Economic Trends in the Chicana/o Population: Policy Implications for the Twenty-First Century." In *Chicanas/Chicanos at the Crossroads: Social Economic and Political Change*. David R. Maciel and Isidro D. Ortíz, eds., University of Arizona Press: Tucson.
- Bernard, H. Russell
1994. *Research Methods in Anthropology* (2nd ed.). Sage: London
- Chavez, Leo
1985. "Households, Migration and Labor Market Participation: The Adaptation of Mexicans to Life in the United States." *Urban Anthropology* 14(4): 301-346.
- del Castillo, Richard Griswold
1984. *La Familia: Chicano Families in the Urban Southwest, 1848 to the Present*. University of Notre Dame Press: Indiana.
- Fink, Arlene
1995. *How to Ask Survey Questions*. Sage Publications: Thousand Oaks and London.
- Fink, Arlene and Jacqueline Kosecoff
1996. *How to Conduct Surveys: A Step-by-Step Guide*. Sage Publications Newbury Park and London.
- Freire, Paulo
2000. *Pedagogy of the Oppressed*, NY: Continuum International Publishing, Inc.
- González, Norma
1995. "Processual Approaches to Multicultural Education." *Journal of Applied Behavioral Science*, 31(2): 234-344.
- Israel, Glenn, D., Lionel J. Beaulieu, and Glen Hartless
2001. "The Influence of Family and Community Social Capital on Educational Achievement." *Rural Sociology* 66(1): 43-68.
- Keefe, Susan Emily
1980. "Personal Communities in the City: Support Networks among Mexican Americans and Anglo-Americans." *Urban Anthropology* 9(1): 51-74.
- Moll, Luis C., Cathy Amanti, Deborah Neff, and Norma González.
1992. "Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms." *Theory Into Practice* 31: 132-141.
- Nelson-Le Gall, S.
1985 "Help-seeking Behavior in Learning." In E.W. Gordon (ed.) *Review of Research in Education*, 12: 55-90. Washington: American Education Research Association.
- O'Leary, Anna M. Ochoa.
1999. *Investment in Female Education as an Economic Strategy among U.S.-Mexican Households in Nogales, Arizona*. Ph.D. diss., Department of Anthropology, University of Arizona.
- Romo, Harriett D. and Toni Falbo
1996. *Latino High School Graduation: Defying the Odds*. Austin: University of Texas Press.
- Selby, Henry A., Arthur D. Murphy, and Stephen A. Lorenzen
1990. *The Mexican Urban Household: Organizing for Self-Defense*. University of Texas Press: Austin.
- Stanton-Salazar, Ricardo
2001. *Manufacturing Hope and Despair: The School and Kin Support Networks of U.S.-Mexican Youth*, NY: Teachers College Press.
- Valenzuela, Angela and Sanford M. Dornbusch
1994. "Familism and Social Capital in the Academic Achievement of Mexican Origin and Anglo Adolescents" *Social Science Quarterly*, 75(1) March 18-36.
- Vélez-Ibáñez, Carlos G. and James B. Greenberg
1992. "Formation and Transformation of Funds of Knowledge among US.-Mexican Households." *Anthropology and Education Quarterly* 23: 313-335.
- Vélez-Ibáñez, Carlos G.
1988. "Networks of Exchange among Mexicans in the U.S. and Mexico: Local Leveling Mediating and International Transformation." *Urban Anthropology* 17 (1): 27-51.
1993. "Ritual Cycles of Exchange: The Process of Cultural Creation and Management in the U.S. Borderlands." In *Celebrations of Identity: Multiple Voices in American Ritual Performance*, edited by Pamela R. Frese. Westport Connecticut & London: Bergin & Garvey: 120-143.

Mexican American Studies & Research Center

<http://masrc.arizona.edu>

WORKING PAPER SERIES



The goal of the MASRC Working Paper Series is to disseminate research on the Mexican American experience. Scholars from the Social and Behavioral Sciences, Public Policy fields, and the Humanities are encouraged to submit manuscripts. Areas of particular interest include the Mexican immigrant experience in the United States, History, Minority Economic Participation, and Public Health.

- No. 1: Bilingual Development and the Education of Bilingual Children During Early Childhood. Eugene García and Steve Martínez, 1981.
- No. 2: The Border Patrol and News Media Coverage of Undocumented Mexican Immigrants During the 1970s: A Quantitative Content Analysis in the Sociology of Knowledge. Celestino Fernández and Lawrence R. Pedroza, 1981.
- No. 3: The Evolution of Higher Education in Mexico: A Profile. Martín M. Ahumada, 1982.
- No. 4: Reformation of Arizona's Bilingual Education Policy: Litigation or Legislation? Michael D. Sacken, 1983.
- No. 5: Hispanic Youth in the Labor Market: An Analysis of "High School and Beyond." Roberto M. Fernández, 1985.
- No. 6: Selections from *De la Vida y del Folclore de la Frontera*. Miguel Méndez, 1986.
- No. 7: Entrepreneurship and Business Development: The Case of Mexican Americans. David L. Torres, 1986.
- No. 8: Mexican American Youth Organization: Precursors of Change in Texas. Ignacio García, 1987.
- No. 9: Determinants of Involuntary Part-Time Work Among Chicanos. Roberto M. De Anda, 1987.
- No. 10: Dilemmas of the High Achieving Chicana: The Double-Bind Factor in Male/Female Relationships. Judith T. González, 1987.
- No. 11: Chicano Urban Politics: The Role of the Political Entrepreneur. David E. Camacho, 1987.
- No. 12: Mexicanos and Chicanos: Examining Political Involvement and Interface in the U.S. Political System. John A. García, 1987.
- No. 13: Phenotypic Discrimination and Income Differences Among Mexican Americans. Edward E. Telles and Edward Murguía, 1988.
- No. 14: Hispanic Business in Tucson Since 1854. Melissa Amado, 1988.
- No. 15: An Exploratory Study of Bi-National News in Mexican and American Border Area Newspapers, 1977 to 1988. Thomas Gelsinon, 1990.
- No. 16: *Tierra No Mas Incógnita: The Atlas of Mexican American History*. Antonio Ríos-Bustamante, 1990.

- No. 17: *El Orgullo De Ser: Mexican American/Latino Applied History Programs, Exhibitions and Museums.* Antonio Ríos-Bustamante, 1990.
- No. 18: *Motivators for Colon Cancer Prevention Among Elderly Mexican Americans.* Judith T. González, 1990.
- No. 19: *Predictors of Breast Self-Examination Among Mexican American Women: A Path Analytic Model.* Judith T. González, 1990.
- No. 20: *U.S. Immigration Authorities and Victims of Human and Civil Rights Abuses: The Border Interaction Project Study of South Tucson, Arizona, and South Texas.* Robert E. Koulis, Manuel Escobedo, Raquel Rubio-Goldsmith, and John Robert Warren, 1994.
- No. 21: *National Origin Based Variations of Latino Voter Turnout in 1988: Findings from the Latino National Political Survey.* John R. Arvizu, 1994.
- No. 22: *Selections from A Frontier Documentary: Mexican Tucson, 1821-1846.* Kieran McCarty, 1994.
- No. 23: *Utilizing the Informal Economy: The Case of Chicago's Maxwell Street Market.* Steven Balkin, Alfonso Morales, and Joseph Persky, 1994.
- No. 24: *José Rangel Cantú: South Texas' Fiery Radio Warrior.* Carlos Larralde, 1995.
- No. 25: *Beyond Access to Health Care: Institutional and Cultural Barriers Experienced by Mexican Americans in a Southwestern Community.* Antonio L. Estrada, 1996.
- No. 26: *The Education of Immigrant Children: The Impact of Age at Arrival.* Arturo González, 1998.
- No. 27: *Mexican American Women and Social Change: The Founding of the Community Service Organization in Los Angeles, An Oral History.* Linda M. Apodaca, 1999.
- No. 28: *The Influence of Cultural Values On Self-Efficacy in Reducing HIV Risk Behaviors.* Antonio L. Estrada, Barbara D. Estrada, and Gilbert Quintero, 1999
- No. 29: *LULAC and Veterans Organize for Civil Rights in Tempe and Phoenix, 1940-1947.* Christine Marín, 2001.
- No. 30: *Of Information Highways and Toxic Byways: Women and Environmental Protest in a Northern Mexican City.* Anna Ochoa O'Leary, 2002.
- No. 31: *Social Exchange Practices among Mexican-Origin Women in Nogales, Arizona: Prospects for Education Acquisition.* Anna Ochoa O'Leary, 2004.
- No. 32: *Flexible Labor and Underinvestment in Women's Education on the U.S-Mexico Border.* Anna Ochoa O'Leary, Gloria Ciria Valdez-Gardea, and Norma González, 2005.
- No. 33: *Viva Emiliano Zapata! Viva Benito Juarez! Helping Mexican and Chicano Middle School Students Develop a Chicano Consciousness via Critical Pedagogy and Latino/Latina Critical Race Theory.* Martha Casas, 2006.
- No. 34: *Mujeres en el Cruce: Mapping Family Separation/Reunification at a Time of Border (In)Security.* Anna Ochoa O'Leary, 2007.