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The Impact of Education on the Female Labor Force in Argentina and Paraguay

CATALINA H. WAINERMAN

In her book *Women and Work in Developing Societies*, Nadia Youssef points out that there are at least four factors influencing female employment in nonagricultural work.¹ From the demand side (1) the level of economic development and (2) the specific organization of the economy, and from the supply side (3) the level of educational achievement and (4) the marital and fertility characteristics of the female population.

In this paper I shall focus on the factors impinging on the supply. How do education and family characteristics affect the supply of women to the labor force? Having different educational levels, which depends on the insertion within the socioeconomic structure, implies different interests, values, and attitudes. These show up, among other behavioral spheres, in reproductive and marital patterns. These patterns are, in turn, closely related to female involvement in economic activities. Actually, the more educated a woman is, the higher the probability that she will remain single, marry later and, having married, postpone childbearing longer and have fewer or no children. In societies where females bear the primary responsibility for sociological as well as biological reproduction (as is the case in most known societies), participating in the productive structure implies taking on a double role. Therefore, at each stage of the life cycle, the woman's decision to join the labor force cannot be independent from the characteristics of the family: with or without husband, with or without small, adolescent, or adult children.

Regardless of the relationship to marital and reproductive patterns, a higher level of education improves the competitive position of women in the labor market and increases the information about job opportunities and the probability of getting better-paid jobs that are also more gratifying and have more flexible working hours. In other words, it increases the (subjective and objective) opportunity cost of staying outside the labor

This paper deals extensively with part of the results arrived at in the research project "La participación de la mujer en la actividad económica en la Argentina, Bolivia y Paraguay: Un estudio comparativo" [Female participation in economic activity in Argentina, Bolivia and Paraguay: A comparative study]. This project was sponsored by the International Development Research Center (IDRC) of Canada under contract no. 3-9-76-0009-02 and carried out jointly by the Centro de Estudios de Población (CENEP, Argentina), the Centro de Investigaciones Sociales (CIS, Bolivia), and the Centro Paraguayo de Estudios Sociológicos (CPES, Paraguay). This article is based on a paper presented at the Workshop on Women's Roles and Fertility sponsored by the International Development Research Center, Ottawa.

¹ Nadia Youssef, *Women and Work in Developing Societies* (Berkeley: University of California Press, 1974).

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market. Furthermore, a longer exposure to formal education usually raises economic aspirations, stimulates a redefinition of domestic duties to make housekeeping easier, and tends to change the position of women within the family structure. Personal fulfillment through extradomestic activities becomes meaningful as an alternative to fulfillment through the role of mother-homemaker.

Summing up, whether due to its effects on family composition or on life conceptions, or to the economic opportunities it opens up, education plays a central role in the explanation and prediction of female labor force attachment. This point is agreed upon both by researchers enrolled in neoclassical economics (*New Home Economics*) as well as by those who subscribe to other approaches when dealing with female supply to the labor market.² Jaffe and Ridley review a large number of studies of the factors affecting female labor force membership and fertility.³ They point out that even though the significance of education is acknowledged, little or no attention has been paid to the interrelationship among the three variables.

In this paper, while focusing on the two supply aspects brought out by Youssef, I shall move in the direction suggested by Jaffe and Ridley. The context of the inquiry is Argentina and Paraguay in 1970, and the objective is twofold. I shall attempt to identify which females, in different educational levels and "family situations," defined in terms of the presence or absence of husband and of children, have a greater propensity to participate in the labor market. I shall also try to evaluate how formal education and family situation influence that propensity. The data for this study are drawn from the latest available population censuses of Argentina (1970) and Paraguay (1972). The analysis is made at the national level. Because of lack of comparable data, no analysis is undertaken for urban versus rural areas.

Even though this study includes only two countries, the substantial structural differences between them will enable us to generalize the findings beyond these two cases. Argentina and Paraguay, though sharing a common cultural tradition and historical circumstances, represent two clearly different cases in demographic, economic, and sociological terms.

By 1970 Argentina was among the 10 most highly urbanized countries in the world. It was one of the most urbanized in Latin America, with almost 80 percent of its population residing in cities. It differs from most countries in the region because of its relative racial homogeneity and the

² See Guy Standing, *Labour Force Participation and Development* (Geneva: International Labour Office, 1978), chap. 6.

³ A. J. Jaffe and J. C. Ridley, "Fertility and Lifetime Employment—non-Spanish White Women," *Industrial Gerontology* (Winter 1976).

existence of a large middle class. The population age structure is relatively old and the literacy level considerably high. The country is now at a comparatively high level of industrialization for Latin America. By 1970 the agricultural sector contributed only 15 percent of the gross domestic product, and 15 percent (3.8 percent of females and 18.5 percent of males) of the total labor force was engaged in agriculture.

Paraguay is a predominantly rural country, with slightly over 37 percent of its population living in urban areas. It has one of the highest birthrates in the region, almost double that of Argentina, and its literacy level, though substantially increased since 1950, is still relatively low compared to Argentina. Paraguay's economy is based on agriculture and handicrafts. By 1970, the agricultural sector contributed 37 percent to the gross domestic product and employed 51 percent (13.2 of females and approximately 62 percent of males) of the total labor force.

In spite of these structural differences, by 1970 the refined labor force participation rates of women aged 12 and over were fairly similar in both countries (25.3 percent in Argentina; 21.1 percent in Paraguay). These are relatively high levels for Latin America, though they are low rates compared with the United States and several European countries. The major difference in female participation between the countries lies in the structure of the labor force membership. In Argentina, over two-thirds of active women are employed in the tertiary sector—in domestic service and as professionals and technicians engaged in jobs related to health and education. In Paraguay, a substantial number of females are employed in the agricultural sector, and most of the rest work in domestic service or as artisans and operatives in small-scale activities which are usually carried out at home.

General Background

Education Drives Women toward the Labor Market

Illiteracy has long ceased to be a serious problem in Argentina as a whole, although there are regional variations. Among persons age 10 and over, it is 7.4 percent for females and 5.6 percent for males. Most of the population has some primary education, but secondary and higher education is still the privilege of a minority, although it has expanded in the past decades.

The situation in Paraguay is different. Even though illiteracy has dropped almost by one-half since 1950, it is still relatively high in the population age 12 and over: 17.7 percent of females and 9.7 percent of males. In younger age cohorts the gap between males and females is narrowing as education expands.

As in Argentina, most of the population in Paraguay has not gone beyond primary education. The number of primary school dropouts is

substantially higher in Paraguay, resulting in a lower level of education. For instance, in Paraguay, only 20 percent of women age 12 and over who entered primary school completed it; in Argentina, 40 percent of women age 10 and over finished primary school. The same is the case for the secondary level: only 23 percent of Paraguayan females completed it, as compared with 41 percent of Argentinian females. (In both countries, the number of dropouts is higher among males than among females.) To summarize, even though in both countries there is an absolute majority of females who did not receive more than primary education, completion of primary school is more unusual for Paraguayan than for Argentinian women.

In spite of the above differences—less average formal schooling and greater difference in education between the sexes in Paraguay than in Argentina—in both societies formal education is an important credential for entry into the female labor market. Clearly this credential benefits the most highly educated. The average educational level of working women surpasses that of nonworking ones. In Argentina, 31.4 percent of the females active in the labor force had primary education or above, as opposed to only 20.8 percent of all the females of working age. The equivalent figures for Paraguay are 22.2 percent and 12.0 percent, respectively.

Level of education does not function as a recruitment criterion in the labor market in the same way for men as for women. This does not mean that education has no effect on the positions men hold in the economic structure, but that for the males the level of education does not affect their entry into the labor market.

An analysis of the participation profiles of groups with different educational levels clearly shows, in the case of females, that the probability of participating in the labor market is closely related to years of schooling. The higher the level of education attained, whatever the age group, the higher the probability that women will participate in the labor force. This is the most frequent pattern both for developed and developing countries.⁴ Among the latter, however, there are several instances where a U-shaped nonlinear pattern has been found. This is the case, for instance, in India, Colombia, and Bolivia, where the percentage of active females among illiterate women has proved significantly higher than among literates, though activity rates among the latter increase as schooling in-

⁴ United Nations, *The Determinants and Consequences of Population Trends* (New York: United Nations, 1973), 1:317; Juan C. Elizaga, "Participacion de la mujer en la mano de obra en America Latina: La fecundidad y otros determinantes," *Revista Internacional del Trabajo* 89, nos. 5–6 (1974): 569–88; Edith A. Pantelides, *Estudio de la poblacion femenina economicamente activa en America Latina, 1950–1970* (Santiago: CELADE, 1976).

creases.⁵ In other cases, the relationship between education and labor force participation is either mixed or, in a few countries, negative.⁶ The diversity of universes studied (countries, regions, states, urban and rural population, female population of different ages and marital status, etc.), definitions, measurement techniques, and quality of the data used precludes solid conclusions. All these studies support the conjecture, however, that the relationship between educational attainment and participation of women in the labor force is conditioned by the educational level of the total population (male and female) and by the structure and organization of the economy and, therefore, by the size and structure of the labor force demand.

Notwithstanding the fact that the labor force participation (total as well as for the various sectors) of Argentinian females is higher than that of Paraguayan females, in both countries and almost with no exception in each age group, the activity rates of the females with higher education (complete for Argentina, complete and incomplete for Paraguay) are four or five times as high as the activity rates of illiterate females. For females who reached the highest educational levels, participation in the labor market is a very frequent experience, nearly as frequent as it is for males of any educational level. For females who did not receive several years of primary education, it is a rare experience. These females differ substantially from males at all educational levels. Thus the women at both ends of the educational scale show very clear work behavior: the majority of the most privileged group participate in the labor market, the majority of the least privileged group refrain from doing so. The remainder of females, which are a majority within the active population of central ages, appear to face more frequently the choice between domestic and extradomestic work.

The high participation propensity of the most educated females should not be mistaken with their share in the labor market. In 1970 the overwhelming contribution to the female labor market was made by the least educated; this, however, was not due to their high work propensity but rather to the fact that, in terms of sheer size, they represented the absolute majority of the female population of active age.

In short, a high investment in schooling seems to draw women into the labor market, while a low investment seems to draw them away from it. In the first case, about 80 percent of the females in Argentina and about 60–70 percent of those in Paraguay who are in the central range of the life cycle (between ages 25 and 50) participate actively in the labor

⁵ J. N. Sinha, *Dynamics of Female Participation in Economic Activity in a Developing Economy* (Belgrade: World Population Conference, 1965); Hugo Torrez, *La mujer boliviana y sus características demográficas en la fuerza de trabajo, 1975* (La Paz: Ediciones CIS, 1977); United Nations, *Methods of Analyzing Census Data on Economic Activities of the Population* (New York: United Nations, 1968).

⁶ Standing, chap. 6.

force; in the second case, no more than 20 percent in Argentina and 15 percent in Paraguay, in each age group, do not enter the work force.

The similarity of trends (though not of levels) in both countries should not obscure a difference certainly related to the diverse educational structure of their female populations of active age. The educational thresholds associated with the greatest increases in female activity rates differ for each country: in Argentina, they lie at the transition between the primary and the secondary levels and, still more markedly, at the completion of secondary school; in Paraguay, the equivalent threshold lies at a lower level, coinciding with the completion of the primary level. As stated above, completion of primary school is more exceptional for Paraguayan than for Argentinian females.

Family Burdens Keep Women Away from the Labor Market

The influence of formal education on female work behavior is mediated in part by its effects on marital and reproductive patterns. Even though education, generally acquired prior to family formation, tends to modify family structure and dynamics and the definition of the domestic role, the family situation imposes restrictions on labor force participation regardless of the women's educational level.

Age changes during working life accompany changes in the marital status and in the stages of the family cycle that condition the enactment of mother-homemaker and labor force roles. Therefore, we shall now look into the similarities and differences in the work force participation of females in different kinds of family constellations.

By 1970, in Argentina and Paraguay as well as in most societies, more than half of the females in the work force were single; one-third were married, legally or consensually; and the rest were widowed, divorced, or separated females. In both countries, single women were overrepresented in the labor force, while married women were underrepresented. Separated and divorced women followed the same pattern as single women, and the widows the same as married ones.

This pattern, which holds in both countries, suggests that it is the presence or absence of a husband which influences women's entry into the labor market. The effect is so strong that even between ages 40 and 49, and between 50 and 59, when the demands arising from the presence of small children have disappeared and family burdens become more similar for single, married, widowed, divorced, or separated women, the differential participation in the work force remains at similar levels as among the younger groups.

The presence of a husband is not the only family factor which negatively affects female participation in the labor market; the presence of children has a similar influence. The age-specific activity rates of females with different numbers of children outline a very clear pattern in both

countries: regardless of the presence or absence of a husband at home, the presence of children has a negative influence on female work force participation. Except for females under 20, among whom it is irrelevant to analyze the effect children have (95 percent in Argentina and 94 percent in Paraguay are childless), in each age group between ages 20 and 60 the activity rates of females with larger numbers of children are lower. In Paraguay, the labor behavior of the females with husband and no children shows practically no differences from that of one-child females.

Aside from the fact that, in general, the female participation rates in Argentina are higher than in Paraguay, in both countries the lowest participation profile corresponds to the females with husband and two or more children. Under no circumstances do the labor force rates of women with a husband surpass those of women with no husband. It should be pointed out that, at the same ages, even the rates of childless married females (whose domestic burdens are closer to those of single childless women) are lower than those of single, widowed, divorced, or separated women with two or more children.

These findings lead to the conclusion that the discouraging effect of husband presence outweighs that of children. (Note that within the more active age group, 30–39, the activity rate of females without a husband but with two or more children is far higher than that of females with a husband and no children.) Different economic needs is a major explanation. However, this pattern also reveals cultural orientations with respect to the behavior regarded as appropriate for men and women, and particularly for married women. In Argentina, for instance, labor laws sanctioned for women early this century, and still in force in their basic ideational contents, have consistently discouraged female labor force participation.⁷ Participation has only been accepted when regarded as inevitable, either because of the inadequacy of the spouse's income, or in the case of marital disruption or of single women with needy parents. Even though no equivalent information is available for Paraguay, the similarities observed in other Latin American countries suggest that the situation is probably similar.⁸

The negative relationship observed in Argentina and Paraguay between fertility patterns and female activity rates does not, however, suggest a causal model. It should not be inferred that there is a simple and direct causal relationship from participation in the labor market to reduced family size. Despite an abundant literature, it has not yet been

⁷ Catalina H. Wainerman and Marysa Navarro, *El trabajo de la mujer en la Argentina: Análisis preliminar de las ideas dominantes en las primeras décadas del Siglo XX* (Buenos Aires: CENEP, 1979).

⁸ Marly A. Cardona, "Subsídios do Direito do Trabalho para um debate sobre a situação da mulher," in *Cadernos de pesquisa*, no. 15 (Sao Paulo: Fundacao Carlos Chagas, 1975); Ligia Chang and Maria Angelica Ducci, *Realidad del empleo y la formacion profesional de la mujer en America Latina*, Estudios y monografias, no. 24 (Monte video: CINTERFOR, 1977).

established whether working women tend to reduce their number of children, or whether a selection takes place in which childless women or women with few children tend to have a higher labor force attachment, due to more time available to them, fewer social restrictions, their making up for a social deficit, or some other reason. Nor is the negative relationship clearly established. There are a number of studies which have found no relationship between fertility and female economic activity; others, though very few indeed, have found that for some specific groups of females the relationship in question becomes positive.⁹

In short, it is not only that the direction of the relationship is obscure, but also that the relationship itself has not been sufficiently described. This might be due to analyses being restricted to the association between number of children and work force participation rates without taking into account the children's age, the level of family needs and income, the presence of other adults in the household, the type of the mother's activity, etc.

Some economists argue that the increase in family size and the decrease in per capita income may drive the mother, and other members of the family, toward the labor market so as to keep up the family's standard of living.¹⁰ Sweet, for instance, controlling for the mother's age, the number of children under 18, and the youngest child's age, has found that the participation propensity of the mother increases as the "income adequacy" of the family decreases, that is, as economic pressures increase.¹¹ One of the characteristics which has proved more relevant in the specification of the relationship between fertility and female economic participation is the type of occupation, or what Darian calls "the convenience of work."¹² This is related to the fact that the burden of children differs for mothers depending on whether they work at or away from home, in the modern or in the traditional sector, with flexible or rigid working hours, full or part time, etc. In general, the studies agree in pointing out that the relationship between fertility and female economic participation is no longer negative when the domestic and the productive roles are not too incompatible.

The Varying Family Situation of the Most and the Least Educated Women

We have shown above that females' propensity to participate in the labor market varies according to their level of formal education and to their type of family situation. But, as stated at the beginning of this paper,

⁹ For an exhaustive review of this literature, see Standing, chap. 7.

¹⁰ Ester Boserup, *The Conditions of Agricultural Growth* (London: Allen & Unwin, 1965); Albert O. Hirshman, *The Strategy of Economic Development* (New Haven, Conn.: Yale University Press, 1958).

¹¹ James A. Sweet, *Women in the Labor Force* (New York: Seminar, 1973).

¹² J. C. Darian, "Convenience of Work and the Job Constraint of Children," *Demography* 12 (1975): 245-58.

marital and reproductive patterns are not independent of the educational level achieved but, on the contrary, vary systematically with it.

As regards marital patterns, both in Argentina and Paraguay, by 1970 the percentage of married women in each age cohort decreases as educational attainment levels increase. The most educated women tend to marry later. Between ages 20 and 24 in both countries, about half the females with primary schooling are already married, while the percentages are one-third lower among those with secondary schooling and fall to 15–16 percent among those with higher education. The same regularities hold among females active in the work force. These findings add to the frequent evidence existing in many countries on the pattern of marriage delay among the most educated females.¹³

With reference to reproductive patterns, both in Argentina for females aged 50 and over, and in Paraguay for those aged 40 and over, the average number of children of illiterate females is more than double that of females with secondary and higher education. A concurrent trend is observed among childless females: they represent only 10–12 percent of the illiterate group aged 50 and over, but the childless group is three and even four times larger in Argentina and twice as large in Paraguay among those with secondary and higher schooling. Since a level of 10 percent of childless couples seems to be a biological constant, a significant deviation from that figure should be taken to express extrabiological reasons, among which life patterns, attitudes, and values occupy a major place.

The regularities found for the total female population of active ages hold for the active sectors in both countries. Thus, for instance, among women aged 20 years and over, the percentage of married women with two or more children is several times higher among those who had access to secondary schooling. The respective figures are 16.0 and 1.5 percent in Argentina and 22.4 and 1.0 percent in Paraguay. These trends are observed without exceptions in each age group.

The negative relationship observed in Argentina and Paraguay between women's educational achievement and fertility is the most frequent pattern in other countries as well, but it is not the only one found. The relationship between these factors is relatively complex, and it keeps neither the same direction nor the same intensity through time or through space.¹⁴

It seems relevant to ask now whether the greater tendency to enter the work force on the part of better-educated women is due to the

¹³ R. Dixon, "Explaining Cross-cultural Variations in Age at Marriage and Proportions Never Marrying," *Population Studies*, vol. 25, no. 2 (1971): 215–33.

¹⁴ Serim Timur, "Demographic Correlates of Women's Education: Fertility, Age at Marriage and the Family" (paper presented at the International Population Conference, IUSSP, Mexico City, 1977).

facilitating or driving effects of education itself or to the fact that their family situation is more compatible with holding a job. The data presented in tables 1 and 2 show that, whatever the females' age and family situation, almost without exception, in both countries the activity rates of the most educated females are higher than those of the least educated ones. This means that education itself influences female work behavior.

Education Equalizes the Propensity to Participate in the Labor Market

Even though the regularities described refer to both countries, there are differences between them. In Argentina, for example, in the 30–34 age cohort that did not complete or go beyond primary education, the labor force participation rate of females with neither husband nor chil-

TABLE 1
AGE-SPECIFIC FEMALE ACTIVITY RATES BY SCHOOLING AND FAMILY SITUATION, ARGENTINA, 1970

No. of Children and Schooling	Age					
	20–24	25–29	30–34	35–39	40–44	45–49
Two or more children, with husband:						
Incomplete primary or less	8.5	10.4	12.4	12.8	13.1	12.7
Primary	9.5	11.4	12.8	13.4	12.5	12.1
Secondary	23.5	28.1	34.1	36.5	33.3	31.5
Higher	33.3*	52.9	59.1	62.1	60.5	58.4
One child, with husband:						
Incomplete primary or less	11.5	15.3	18.4	21.3	18.9	17.2
Primary	13.6	16.1	21.7	18.8	18.1	16.7
Secondary	29.1	40.5	46.7	47.6	40.9	34.5
Higher	40.3	62.6	75.0	77.4	77.4	65.2
No children, with husband:						
Incomplete primary or less	22.4	29.4	30.0	30.9	26.6	23.1
Primary	32.4	32.6	41.0	39.7	29.2	28.2
Secondary	49.0	56.8	62.3	63.9	58.4	48.3
Higher	60.9	79.1	83.3	72.5	71.4	57.1*
Two or more children, without husband:						
Incomplete primary or less	42.1	54.4	70.4	54.4	50.7	39.7
Primary	44.6	63.6	66.9	67.8	61.2	47.9
Secondary	57.1	63.3	80.6	80.2	64.0	63.8
Higher	.0	83.3*	83.3	95.2	94.1	77.8
One child, without husband:						
Incomplete primary or less	55.5	60.8	65.4	70.3	67.5	49.3
Primary	59.8	61.4	76.7	73.1	66.9	64.2
Secondary	59.2	81.7	82.1	81.0	74.2	63.6
Higher	75.0*	80.0*	88.9*	71.4*	85.7*	90.0*
No children, without husband:						
Incomplete primary or less	59.1	60.8	60.8	56.0	53.6	52.8
Primary	65.2	73.4	71.2	72.2	71.7	65.2
Secondary	70.8	83.0	87.2	86.3	83.7	74.4
Higher	45.6	78.8	88.0	90.8	95.3	83.0

SOURCE. — Unpublished table elaborated by CELADE (Omuece 70).

* Small frequencies.

TABLE 2
AGE-SPECIFIC FEMALE ACTIVITY RATES BY SCHOOLING AND FAMILY SITUATION, PARAGUAY, 1972

No. of Children and Schooling	Age					
	20-24	25-29	30-34	35-39	40-44	45-49
Two or more children, with husband:						
Incomplete primary or less	7.1	8.1	10.5	10.5	12.0	11.9
Primary	15.3	18.6	22.2	22.2	24.2	18.2
Incomplete secondary to complete higher	25.6	36.7	44.1	41.0	38.2	25.3
One child, with husband:						
Incomplete primary or less	9.5	18.6	13.9	12.1	17.3	16.0
Primary	25.1	28.8	40.6	50.0	45.0	31.3
Incomplete secondary to complete higher	33.2	52.1	52.8	58.0	41.5	36.7
No children, with husband:						
Incomplete primary or less	17.1	17.6	19.1	15.5	14.6	15.2
Primary	31.4	40.5	36.9	22.2	40.0	21.4
Incomplete secondary to complete higher	36.0	77.3	73.6	66.7	65.0	54.6
Two or more children, without husband:						
Incomplete primary or less	29.0	32.9	40.0	37.4	39.2	30.7
Primary	38.4	47.0	61.9	61.2	58.1	41.9
Incomplete secondary to complete higher	37.5	58.8	75.0	70.0	64.4	70.3
One child, without husband:						
Incomplete primary or less	36.1	39.5	37.9	50.0	41.4	34.3
Primary	52.0	52.0	74.4	69.2	57.1	38.5
Incomplete secondary to complete higher	56.4	73.1	84.9	90.5	66.7	40.0
No children, without husband:						
Incomplete primary or less	38.2	37.1	45.1	37.7	41.6	33.6
Primary	56.2	63.8	60.4	67.4	53.9	51.6
Incomplete secondary to complete higher	55.1	78.1	84.0	86.8	84.9	68.1

SOURCE. —Unpublished table elaborated by CELADE (Omuece 70).

dren is almost five times higher than those with similar levels of education who had a husband and two or more children. This difference drops to one and a half among the most highly educated females. The same trend is observed in Paraguay, though at lower levels of schooling. In other words, having or not having a husband and children has smaller effects on the labor behavior of Paraguayan than on Argentinian females. Circumstances related to the occupational composition and the family structure probably account largely for that difference. Agricultural and handcrafts employment, which is more prevalent among Paraguayan females, provides less conflict with childbearing. Argentinian women are more frequently employed in the modern sector of the economy as professionals, technicians, or clerical workers in jobs usually carried out away from home and with rigid working hours. Furthermore, there is reason to

believe that the extended family is more prevalent in Paraguay than in Argentina. If this is the case, then Paraguayan females would have greater opportunity to share their domestic duties with others. Even though Paraguayan women have larger numbers of children than Argentinian women, which implies a greater burden of household work, older children can help take care of the younger ones, relieving women of this responsibility.

If education influences the probability of females participating in the labor market regardless of family situation, under what condition do the effects of education surpass those of the family situation, and under what circumstances do the latter surpass the former? To answer this question, we shall focus our attention on two particular groups of females, those for whom family situation and education have opposite effects on labor force participation. We shall compare the rates of the females who have a husband and two or more children and who have the highest educational attainment with those who have neither husband nor children and who have not completed primary school. It should be kept in mind that, in terms of family circumstances, the former group has the lowest rate of labor force participation and the latter the highest. If the most highly educated (but with greater family burdens) show higher activity rates than the least educated (but with smaller family burdens), we could then conclude that the driving effects of education surpass the retracting ones derived from family situation.

For Argentinian females, as shown in figure 1, the effects of education and family situation vary between age cohorts. In the youngest, those aged 20–24 and 25–29, the influence of the family surpasses that of education. These young females have two or more children who for the most part have not yet entered primary school and make greater demands on mothers. At this stage, family burdens keep a high proportion of these women out of the labor force. This trend is strongest among women who are still in school. At these ages, the effects of education surpass those of family situation. (The shaded area in fig. 1 shows the extent to which these females' activity rates are higher than those of females who have neither husband nor children and are in the lower extreme of the educational scale.) At about ages 30–34, the relative influence of the driving and retracting factors becomes even. In short, having two or more children, though quantitatively constant for females of different ages, has qualitatively different meanings along the family cycle.

The changing interaction between education and family situation can be more fully appreciated in the sequence of figures 1, 2, and 3. These illustrate the consequences of the decrease in filial demands, a decrease now due not only to the decreased attention required by the older chil-

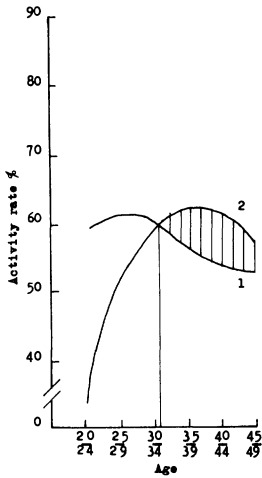


Fig. 1

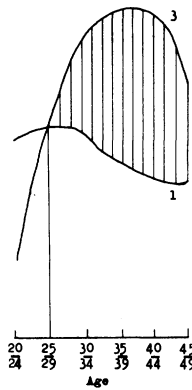


Fig. 2

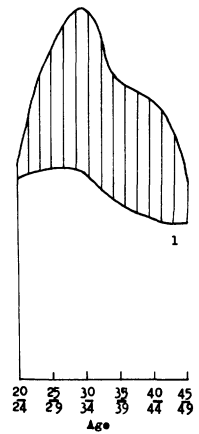


Fig. 3

FIGS. 1-3.—Activity profiles of women, Argentina, 1970. Fig. 1, Women with low family burdens, low education and women with high family burdens, high education. Fig. 2, Women with low family burdens, low education and women with middle family burdens, high education. Fig. 3, Women with low family burdens, low education and women with low family burdens, high education, 1 = no husband, no children, incomplete primary education or less; 2 = husband, one child, higher education; 4 = husband, no children, higher education. Source: table 1.

dren but also to the presence of fewer children. In these figures, the labor force activity rates of females with neither husband nor children and primary education or less are compared with those of women with a higher educational level and a husband at home and with two or more, only one, or no children. These three last sets of women correspond to the groups that, in terms of family circumstances, show the lowest labor force participation. The trend is very clear: the effects of education increasingly surpass those of the family, and they do so in younger and younger age groups. Among females with two or more children, the age group where the effects of both factors become even and counterbalance is that of 30–34 (fig. 1). Among the females with one child, this situation is found in the 25–29 age group (fig. 2), and among childless females, in the 20–24 age group (fig. 3). The smaller the number of children, the shorter the portion of the life cycle where females face greater filial demands. Among married childless females, the driving effects of education appear earlier.

In Paraguay, the participation profiles of the equivalent groups of females are more irregular. The low frequencies of females with high education levels and of married childless females in that country account for much of this irregularity. Even though the patterns arising from the analysis of figures 4, 5, and 6 are not as clear as those for Argentina, the

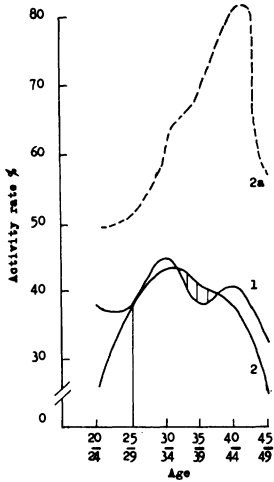


Fig. 4

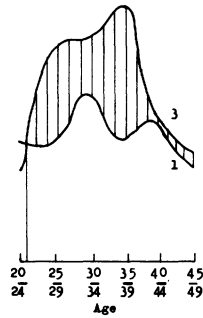


Fig. 5

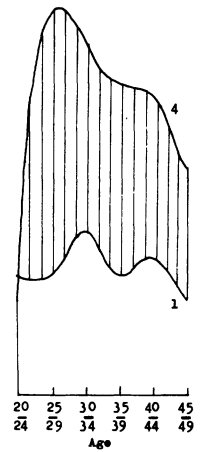


Fig. 6

FIGS. 4-6.—Activity profiles of women, Paraguay, 1972. Fig. 4, Women with low family burdens, low education and women with high family burdens, high education. Fig. 5, Women with low family burdens, low education and women with middle family burdens, high education. Fig. 6, Women with low family burdens, low education and women with middle family burdens, high education. 1 = no husband, no children, incomplete primary education or less; 2 = husband, two or more children, incomplete secondary to complete higher education; 2a = husband, two or more children, higher education; 3 = husband, one child, incomplete secondary to complete higher education; 4 = husband, no children, incomplete secondary to completed higher education.

general trends in both countries are similar. As shown in figure 4, in the youngest groups, ages 20–24 and 25–29, the retracting effects of domestic burdens in homes with a husband and two or more children surpass the driving effects of secondary and higher education. Starting at ages 25–29, however, the activity profiles of these females are almost the same as those of females with neither husband nor children and with primary education or less. This suggests that starting at those ages, the intensity of the drive toward the labor market characteristic of the most educated females counterbalances, though it does not surpass, the intensity of the retraction from the labor market typical of females with husband and two or more children. Nevertheless, when examining the labor behavior of the few females with husband and two or more children and higher education exclusively, the “advantage” of the influence of education over family situation is clearly outlined all along the central ages of the life cycle, as illustrated by the comparison with the dotted curve in figure 4. Because of the low frequencies of females with higher education among those with husband and only one or no children, for the purposes of the analysis in figures 5 and 6, females with secondary and higher education were considered together.

In Paraguay as well as in Argentina, when family pressures originating in filial demands decrease (figs. 2 and 3), the driving effects of educa-

tion easily surpass the retracting effects of the family. Already at age group 20–24, the activity rates of the most educated sector of females with husband and one or no children are the same as the activity rates of the least educated sector of females with neither husband nor children.

Summing up, it would seem that among females with husband, education plays the role of overcoming the negative influence of family burdens. For those without a husband and especially if they have children, when a paid activity would seem to be a necessity rather than an option, education plays the role of accompanying the positive disposition toward paid work. In other words, the driving effects of education have different meanings for females with different family situations.

It should be kept in mind that education keeps a close relationship with position in the class structure. Those who due to their socioeconomic origin have had access to higher education have, in general, a greater likelihood of getting higher and more satisfactory employment with better pay and more flexible work hours as well as greater economic means to purchase in the market the substitutes for part of the domestic chores (domestic service, child care, etc.).

These data also show that children have different meanings for women in terms of economic orientations. Children prevent those women from entering the labor market who are from the lowest educational level who have access to the least privileged positions in the economic structure. Children push into the labor market those women who have the same low educational level but must support the family due to the spouse's absence. Children have little influence on the labor force participation of those women who, on account of their high educational levels, have access to more privileged positions, whether they share the responsibility for economic family burdens with a spouse or not.

Conclusions

This study has demonstrated that formal education exerts a strong influence on labor force participation of women, over and beyond that of family situations, in both Argentina and Paraguay. Research in other countries, both in Latin America and elsewhere, is needed to see if the relationships demonstrated here are generalizable.

The implications of this study for both educational policy and human resource development are clear: education of females has a definite relation to their entry into the work force, and educating women, in this sense, will in the long run contribute to the development of national economies.

There are several issues that remain unresolved by this study and need further investigation. For example, this study did not take into

account specific types of employment and the impact of education and the family on them. We do not know, for instance, whether some occupational roles are more accessible to women with certain familial characteristics than other occupational roles. Further study should distinguish full-time from part-time work, work at home from work away from home, and work with rigid hours from work with flexible hours to see how these clearly affect women's propensity to take one type of employment or another.¹⁵ In addition, research needs to refine the impact of different family constellations on women's work force behavior. This study merely discriminated between women with husbands and without them and women who had two or more children and who had one or none. It did not distinguish between women who had infants, preschool children, or adolescents. It also left unanswered the question of variation in education's impact on labor force participation among similarly educated women with children whose filial demands may differ.

In short, new case studies are needed that will detect for what values of certain structural parameters the relationship found here among education, family, and female employment is valid. In order to understand better that relationship, it will be necessary to advance along the study of the characteristics of female activities and the characteristics of their family situations. This task may mean resorting to data sources other than censuses and turning to sources frequently used by anthropologists, social psychologists, and historians.

¹⁵ Darian calls these characteristics "conveniences of work."