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**PAPER PRESENTED AT THE
THIRD INTERNATIONAL POPULATION CONFERENCE
OF THE CENTRAL AMERICAN ISTHMUS, 2003**

**Poverty and Family Transitions to Adulthood in Rural Localities
on the Yucatan Peninsula**
(Translation of Spanish Version)

Marta Mier y Terán^a

The transition process to adulthood is of interest because it reflects the social origin of individuals and marks their adult life in a decisive manner. The intentionality, timing, and sequence with which adult roles are adopted play a decisive role in later stages of their lives. This influence is due to the fact that the transition process to adult life occurs at a conjunction in personal life histories, and links social origins to subsequent adult achievements (Hogan and Astone, 1986).

Youth is a stage of life that concentrates several changes in a person's social roles, which characterize the transition process to adult life. Leaving school, entering the labor market, leaving the parental home, formation of a conjugal union, and the birth of a first child are events or transitions that imply changes in a person's place within society, in both public and private spheres.

The transitions within the family milieu are decisive. In the case of males, these reflect, among others, the means of transmission of family wealth and the way in which youths acquire residential autonomy with regard to the parental home. Among females, the traditional female role related to the private sphere makes these transitions fundamental for their adoption of an adult role.

In rural zones, youths constitute one of the most excluded sectors in Latin America. They share the poverty and lack of opportunities with the rest of the members of their community; but furthermore, peasant societies are hierarchical and patriarchal, so that youths have little or no influence on family and community decisions, especially adult women and youths of both genders in ethnic communities (Durstun, 1998).

The problem of adoption of adult roles takes on particular interest in contexts of poverty, because it clearly shows the lack of capacities and opportunities among youth and their difficulties in improving their personal and family situation in the following stages of their lives. However, in spite of this interest, little research has been done on this topic in developing countries.

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In these contexts, studies have concentrated primordially on nuptiality and fertility among females, without visualizing the role-change process, excluding the topic of residential independence and limited to the female experience.

In this paper, the objective is to analyze the transition process to adult life within the family milieu for young males and females from marginal rural localities in the three states that conform the Yucatan peninsula.

Background

During the last decades of the 20th Century, Mexican demographic dynamics have been affected by tremendous social and economic transformations. Mortality has continued to decline since the decade of the 30's. The fertility reduction process, which began in the 60's, continues its course. As a result, the population grew at a very high rate, which has been reduced to about one-half in recent years (1.8%). In addition, internal migration has been intense, especially from the countryside to the cities.¹

This dynamic is related to important changes in household formation. First union formation has been delayed; among women, the mean age climbed from 21 years in 1970 to 23 in 1997, and, among men, from 24 to 26 years. The mean number of children at the end of their reproductive years dropped from 6.5 in 1972 to 2.7 in 1997. Average household size also declined, dropping from 5.6 in 1976 to 4.4 in 1997. During this period, widowhood has declined, whereas voluntary dissolution of unions has shown some growth: the proportion of persons separated or divorced doubled from 4.1% to 8.2% among females and from 1.8% to 3.6% among males (Consejo Nacional de Población (Conapo), 2000).

In the country's rural zones, fertility started to decline later and from higher levels and has followed a more tortuous descent. In 1994, the total fertility rate was 3.8 in rural localities and 2.6 in the rest of the localities (Mier y Terán and Partida, 2001).² In rural areas, nuptiality has traditionally been earlier and more intensive (Quilodrán, 1991). In 1976, the relative intensity of nuptiality was 1.06 in rural localities and 1.00 in urban ones. However, two decades later, the relationship is inverted, since the relative intensity in rural areas declined to 0.94 (Gómez de León, 2001).³ The causes behind this change in the nuptiality patterns have not been probed, but possibly it is related to the emigration of young males from the countryside to the United States.

One of the most important social changes that have taken place in Mexico has been the expansion of the educational system. During the 90's, practically all children

¹ In México, approximately the same number of males and females migrate internally, but female migration is earlier. At earlier ages (10 to 24 years), there is a predominance of females migrating for work-related reasons, while males at these ages migrate for studies and do so less frequently (Partida, 2001).

² There is no single criterion for distinguishing rural localities from other localities. In most sociodemographic studies of Mexico, localities with fewer than 2,500 inhabitants are defined as rural. However, some studies consider localities with more than 15,000 inhabitants as urban, those with 5,000 to 15,000 inhabitants as mixed, and those of smaller size as rural. In the bibliographic review presented here, rural localities are defined as those with fewer than 2,500 inhabitants, unless otherwise specified.

³ Furthermore, a pregnancy is seen to trigger marriage, and that greater education (9 or more years) is what most reduces the propensity to marry (Gómez de León, 2001)

attended school, and frequently, they completed primary education and began secondary.⁴ Furthermore, the tremendous inequalities in basic education between urban and rural areas have declined although even in recent years, the probability of completing primary education and even more so of entering secondary is lower in the rural areas (Mier y Terán and Rabell, 2002).

Another tremendous change has been a greater incorporation of women into the labor market after 1970. In that year, the female participation rate was 16% and it increased to 35% by 1995. At the beginning, urban women with greater education were more involved in the labor market with less likelihood of dropping out of the workforce while forming their families. In more recent years, less educated women and those with young children have been entering the labor force (Oliveira *et al.*, 2001; Mier y Terán, 1996). In the rural areas, women's work has also increased, but less so than in the urban areas (United Nations, 1993).

The demographic and social dynamics of the Yucatan peninsula have been studied less, and in certain essential aspects, it differs from the rest of the country. Some zones of the Yucatan peninsula have become spaces with a population continuity running from the pre-Hispanic era and that of the Colony. These spaces are characterized by the survival of ancient indigenous settlements and their coexistence with newer Spanish foundations (Aguilar and Graizbord, 2002). In these areas, the Mayan population has maintained a significant presence.⁵

Yucatan has shown a moderate increase in population density. Campeche and Quintana Roo have ample zones of scant settlement and others that are more populous linked to the oil industry, tourism activities, and the state capitals. In 1995, the urban population (15,000 or more persons) predominated, and rural localities maintained a dispersed population. The region has an important communications infrastructure (Aguilar and Graizbord, 2002).⁶

The three states that make up the zone have high indices of marginality; in 1995, they were classified as high degree (Conapo, 1999).⁷ On the peninsula, the situation in the rural zones is particularly difficult. On the Yucatan state, in spite of an ample

⁴ Primary education includes six years and secondary three. Until 1992, only primary was compulsory; after that date, secondary also became compulsory. These two cycles constitute basic education. The 2000 census data show that 67% of the Mexican children ages 12 to 14 years have concluded primary and 59% has entered secondary. In the rural localities of the 10 states with greater indigenous presence, included the three of the Yucatan peninsula, these proportions are 53 and 44% (Mier y Terán y Rabell, 2003).

⁵ The Mayan language is the second most important in Mexico (14.2% of the indigenous language speakers), around 780 thousand persons 5 or more years of age. Furthermore, almost all of the Mayans are concentrated on the Yucatan peninsula (Conapo, 1998).

⁶ Throughout the country, most of the rural population is distributed among a tremendous number of small, disperse localities, lacking infrastructure and equipment. There is a close relationship between rural dispersion, precarious living conditions, and isolation. Seventy percent of the localities with less than 1,000 inhabitants fall in the categories of high and very high marginality. The intermediate localities (5,000 to less than 15,000), are closely related to the rural localities that they serve, although they are also closely linked to the urban centers (Aguilar and Graizbord, 2002).

⁷ Only Quintana Roo has been cataloged in a mid-category, but this is due to the tremendous tourism development in the urban centers.

highway network, agricultural production is deficient due to the rocky soil, erratic and scanty rainfall, and limited technological development.⁸ These conditions promote high underemployment and unemployment rates (Brannon and Baklanoff, 1987). In the other two states the rural population frequently lives in jungle areas with a predominance of subsistence agriculture. Among this rural population, the indigenous groups are particularly underprivileged since they have less access to land, education, non-agricultural activities, and services (De Janvry and Sadoulet, 2002).

The demographic dynamics of Campeche and Quintana Roo are characterized by early nuptiality and high fertility, while Yucatan, which is more urbanized, has medium nuptiality and lower fertility (Conapo, 1999; Mier y Terán and Rabell, 1993).

Internal migration in this zone is characterized by a similar number of in-migrants and out-migrants in Campeche and Yucatan and by a high in-migration headed to the urban areas of Quintana Roo. The migration flow from Yucatan to Quintana Roo constituted one of the 32 major streams in the country in 1990-1995. Emigration from these states to the United States is infrequent. Remittances are scarce in these states, especially in Campeche and Quintana Roo (Corona and Tuirán, 2001). There is no data on the flows from the rural to the urban areas, However, the rapid urbanization process in the three states,⁹ and the development of the oil industry in Campeche and of the tourism in Quintana Roo suggest important population movements within the region.

Throughout the country, the settlement pattern of the indigenous population is primordially rural: 60.8% reside in localities of less than 2,500 inhabitants. The Mayans, however, have higher urban proportions, since only one-third of the Mayan households reside in small localities. In association with reduced rurality, Mayan fertility is the lowest among the autochthonous groups (TFR = 3.25 in 1995), and female age at union was among the highest (19.8 years in 1990) (Conapo, 1998).¹⁰

Reference Framework

People's lives are structured by the social norms that rule appropriate age roles, as well as the behaviors associated with the different roles. Each society defines its own calendar. In different societies, they define the degree to which they expect individuals of certain ages to play specific roles and not others, the explicit nature of these

⁸ In the Yucatan state, there are four main economic regions: 1) the center north and west characterized by the henequen crop; 2) the corn and cattle region in the northeast 3) the corn region in the southeast; 4) and the center and west south regions where fruits and vegetables are grown. The Mayas of the henequen region abandoned the traditional corn crop and grew henequen instead since the mid XIX century and until the industry crisis in the 60's. In 1995, only 40% of the labor force in this region worked in the primary sector, and only 20% grows henequen; income is very low: almost 70% of the workers earn less than the minimum salary. The citrus industry in the south and the construction in the capital city have absorbed the unskilled labor force from the henequen and corn regions (Quezada, 2001).

⁹ Census data show that 34% of the population on the Yucatan peninsula lived in localities with 15 000 or more inhabitants; in 1990, this proportion was 55%. In the states, these proportions are: 41% and 51% in Campeche, 27% and 60% in Quintana Roo, 33% and 56% in Yucatan. It is noteworthy that, given the rapid development of the tourist industry the urban population in Quintana Roo grew more than 10 times in these two decades.

¹⁰ For all ethnic groups, the total fertility rate is 3.80 and age at first union is 18.9 years.

expectations, and the nature of the sanctions for those that do not comply with the expectations. Individuals internalize the normative calendars, so that they can be placed as precocious or delayed with regard to specific transitions. These calendars are rooted in each culture and structure the way that individuals perceive themselves and plan their life course (Hogan and Astone, 1986).

The expansion of the educational system and labor markets has favored the institutionalization of each person's life course. Age plays a key role in the organization of the social institutions, which has accentuated the age regularities in people's lives. Laws reinforce changes in institutions, by imposing minimum compulsory school attendance and minimum ages for access to the labor force.

The institutionalization of the life course has affected role adoption behaviors in private life. The growing emphasis in education as well as the labor market conditions have delayed the age when young people are considered socially mature. The expectations around the appropriate ages and sequences for transitions are imposed by social pressures, and the events that occur outside the expected order, as well as other deviations from the normative family life course may have negative consequences on individuals.¹¹ It is said that early or premature family transitions may have negative consequences on the wellbeing of young females, since they become economic dependents of the males, and are relegated to subordinate domestic roles. Furthermore, a union and the birth of a child at early ages frequently hinders youths from continuing with their education and acquisition of the skills to access better employment, and finally, an early union has greater likelihood of dissolution (Heaton, Forste, and Otterstorm, 2002). Likewise, emotional, social and economic pressures are severe for single mothers: they do not have a partner to share the childrearing responsibilities and in some cases they do not have their family support and suffer the community disapproval (The Allan Guttmacher Institute, 1998).

In the United States, through the end of the 80's, age at completion of schooling and entrance into the labor force had increased, while that for establishing an independent household and family formation had occurred at earlier ages, so that the time for transitions was more compact and there was a frequent overlap between the transitions in public and private life (Hogan and Astone, 1986). Furthermore, a separation arose between residential independence and matrimony (Goldsheider and DaVanzo, 1989; Mulder, Clark, and Wagner, 2002). In a recent study in Europe, it was found that the age at marriage and that of the birth of the first child vary greatly, and that these two transitions are becoming less and less related to each other. The authors state that, in the majority of cases these two transitions no longer form a part of the process of transition to adult life (Corijn and Klijzing, 2001).

Practically all age-stratified systems differ by gender. Social role definition by age also considers an individual's gender. Normative calendars vary by gender, as a

¹¹ Rindfus et al (1987) analyze the sequence of the transitions in the public domain and it's consequences on the birth of the fist child. They observe a frequent switch between school and work, and that certain job characteristics are more important than the sequence of the two activities.

reflection of dominant cultural differences (Hogan and Astone, 1986). In almost all societies, marriage and childbearing occur earlier in women's lives than in men's. Also, given the traditional gender roles, women combine less the adult roles in the public and private spheres. For males and females, educational achievements affect work opportunities as well as their position in the marriage market, but the mechanisms by which this influence acts vary by gender, since the paths to greater status are different. Gender differences in the division of labor make personal income more important for males when contracting marriage than for females.

Socio-economic conditions constitute another important axis of differentiation due to the fact that they determine access to valuable community social resources. This is a key consideration in studies on transition to adult life, since this is the period in which youths convert their attributes and social origins into subsequent adult achievements (Hogan and Astone, 1986). In developed countries, it has been shown that the resources of the family of origin play an important role in the transition to adult life. Parental education and occupation, number of siblings, family income, and other family characteristics influence the timing and sequence of the transitions to adult life (Marini, 1978, 1984c; Bracher and Santow, 1998).

The human capital concept states that expenditures on education are investments in human capital because they provide the individual of knowledge and capacities that result in higher income during his work life. Investments in human capital tend to respond in a rational manner to the benefits and opportunity costs (Becker, 1993). Early marriage and family formation hinders human capital accumulation through the anticipation of the school abandonment and through shorter periods of work before marriage and childbearing among women. Social structural conditions influence the transitions to adult life through the perceptions of the opportunity costs and benefits of marriage, family household leave and childbearing (Hogan and Astone, 1986; Heaton, Forste and Otterstorm, 2002).

In developed countries, it has been seen that youths' aspirations and plans have a decisive influence on their transition to adult life. Educational aspirations are closely linked to marriage plans: high educational expectations are associated with a delayed marriage. The educational level achieved plays an important role in this transition process due to the effect of a prolonged formation at the time of the other transitions; youths may postpone the other transitions in order to facilitate their educational and labor achievements (Hogan and Astone, 1986; Cooney and Hogan, 1991; Corijn and Klijzing, 2001). Transitions and stages influence each other: one year of additional studies delays marriage more in women and early marriage impedes greater formation in both sexes (Hogan and Astone, 1986).

Nuptiality Models

The life course perspective states that the adoption of roles in the two domains might result in conflict. In societies where people remain in school for longer periods, the student and the father or mother roles are commonly incompatible, mainly for women. Young people will decide if continuing with their studies or starting their family

formation, depending on the opportunity costs and benefits of higher education and of marrying and starting childbearing at young ages.

There are two main models to explain marriage patterns among men and women. The first is based on the theory of the new household economics developed by Becker, and which states that due to the gender division of labor, there is a specialization and compensation among spouses, which makes marriage attractive to both of them: the male as provider and the female dedicated to household chores and child-rearing. The more differentiated the gender roles are, the more attractive marriage is. Among women, higher levels of education favors greater participation in the labor force with higher income, and therefore benefits from marriage are reduced because of greater economic independence and the opportunity costs rise because of the forgone income. In this model, women with higher education and participating in the economic activity tend to postpone marriage, temporarily or definitely.

In the marriage search models, the union is a result of a search process. Males and females participate in a marriage market affected by the suitability or attractiveness of their characteristics and the availability of potential companions; the lesser the uncertainty of their potentialities, the greater will be their attractiveness (Oppenheimer, 1988; Parrado and Zenteno, 2002). Individuals in the labor force are the most attractive companions and probably have the necessary resources to marry and establish an independent household (Cooney and Hogan, 1991; Bracher and Santow, 1998). In this second model, women with higher education and working are better potential candidates and will marry at earlier ages.

The male's importance as provider causes that for males the relationship between the economic characteristics and union formation is the same in both models. The better educated young males who are working, and who have better income and jobs, tend to marry faster. On the other hand, among females, the models predict different outcomes. According to the first model, a higher educational level, as well as labor market participation will make marriage less attractive to them, and so they will tend to delay it. In the second model, these educated and working women are better potential candidates, and so will tend to marry more rapidly.

A study of three generations of women and men in Mexico points out that the interaction of education with work opportunities influence marriage timing (Parrado and Zenteno, 2002).¹² Women with low education have poor job prospects, but since they are not expected to be the main provider of the household, the uncertainty linked to their employment does not hinder marriage. Women with intermediate educational levels are the ones that experience the greater uncertainty in the labor market and have lower risks of marrying. The degree of uncertainty differs between occupational groups; women that do household chores and child-rearing have no uncertainty regarding their prospects, so they tend to marry early.

¹² Birth cohorts are: 1936-1938, 1951-1953 and 1966-1968.

Another research on the family formation process amongst Mexican women shows that those who work tend to postpone marriage and motherhood, corroborating the specialization model hypothesis. This delay occurs, regardless of the woman's educational level. The relation between education and the family formation postponements is given through the work: higher educational levels are associated with higher risks of paid work and therefore with a latter marriage (Lindstrom y Brambila, 2001).

According also with the specialization model, a paper on 13 Latin-American countries points out that education and work constitute alternatives to early marriage and childbearing, and when these alternatives are more attractive, women tend to postpone their family formation (Heaton, Forste and Otterstorm (2002).

Family Household Leave.

Depending on the social organization, the departure from the family household might take place in different stages in the young people's lives and obey to different motives. In the life course perspective, this event is crucial in the process of transition to adult family life because it is linked to the acquisition of independence from the parents. The departure from the family home is closely related to other transitions and stages in the life course. Frequently, married couples abandon their parents' household and form one of their own. However, some young people leave their family household because of other causes and some others who are married remain in their parents' home.

In the less traditional European countries, the parental home leave is more related to events in the public domain, while in the more traditional countries it is the beginning of the family formation that motivates the departure (Corijn and Klijzing, 2001). In these latter countries, the departure has suffered a delay because of the trend to postpone marriage. In the United States, continuing in school favors abandonment of the paternal household, but not due to marriage (Goldsheider and DaVanzo, 1989). The greater the personal resources for forming an independent life, the greater the probability of abandoning the paternal household. The authors state that this relationship between resources and independent residence suggests that residential independence is generally preferred. Young people with less traditional norms and values, the more educated, the least religious, those not belonging to ethnic groups and those who reside in the more urbanized areas chose independence from company.

Little is known about the departure of youths from the family household in developing countries. The scarcity of studies on this topic is probably due to the fact that this transition is frequently linked to marriage or migration. However, in these contexts, the study of residential independence is also relevant and has very different characteristics from those seen in modern societies (Johnson and DaVanzo, 1998).¹³ In rural communities, the departure of the male children is costly when the household is

¹³ Goldsheider and DaVanzo (1989) propose that the conceptualization of abandonment of the paternal household pivots around five types of influences: the youth's resources, household resources, preferences regarding leaving the paternal household prior to marriage (co-residence or privacy), community characteristics, and contemporaneous roles performed by the youths (work, study).

the productive unit and they constitute the manpower for the land or family enterprise. Amongst daughters, the departure from the family household may be costly when they help out with domestic chores and take care of younger siblings and the infirm.

The adoption of adult family roles in the rural marginal localities of the Yucatan peninsula

The population in this study resides in rural communities classified with high or very high marginality, where large majorities of the households live in conditions of poverty.¹⁴ One common element in the definitions of the concept of poverty is the privation of a certain level of income or consumption, as well as abilities and opportunities to overcome their personal and family situation. A person's abilities constitute his or her potential to break out of poverty and live better; the use of these abilities requires assets and resources that, when absent, leave the abilities in potential (ECLAC, 2001).

Families with scant capital in land and animals survive with precarious subsistence agriculture and animal husbandry, complemented with agricultural wage labor and income from members that have emigrated (ECLAC, 2001). In marginal zones with scarce natural resources and non-existent income sources, temporary out-migration has become an important source of income for peasant families. Frequently, youths emigrate to complement family income, or in order to save to establish an independent household. The households without land are more heterogeneous, but generally have better education and geographic location than those of the landed-peasants, which allows them to find better wage non-agricultural employment or to recur to self-employment. In general, the distribution of rural income is very inequitable, due to the differences in economic resources, abilities, and opportunities, but non-agricultural income aids in the mitigation of differences among agricultural families (De Janvry and Sadoulet, 2001).

In rural societies, the gender system is an important axis of differentiation in the transition to adult life, since in this stage the definition of the traditional gender roles ends up. Among males, the years of youth are important to prepare them for their role as household provider, whether at school or in the family business; education is important, especially for those who do not inherit lands. In public life, women abandon school earlier and enter the labor market less frequently, so that it is common to find them after completing primary education, tucked away in the household, involved in household chores; their transitions in the family sphere occur at very early ages. Formal education is less valued given the traditional female role linked to domestic chores and

¹⁴ With information from the 1990 Population Census and the 1995 Enumeration, Conapo estimated an index of marginality for each locality, using the principal component method based on 7 variables: percent illiterate among adults (>14 years of age), percent households without water, percent households without drainage, percent households without electricity, average occupants per room, percent dwellings with earthen floors, percent population working in agriculture. With this index, Conapo classified localities into 5 groups: very high, high, median, low, and very low marginality (Conapo-Progres, 1998).

childbearing. However, young girls with higher educational levels have greater chances to obtain employment outside agriculture and better than that as domestic help.¹⁵

In most societies, marriage constitutes an important event in the social and economic spheres. In the rural communities of the developing world, matrimony is a gradual process of autonomy, in which parents and other relatives participate. After marriage, oftentimes the young couple remains in the husband's family household for a relatively long period; this residence is defined by job ties and complementary strategies between father and son. If the family has land, children may marry at earlier ages and remain within the family household (Durstun, 1998). Having a small number of children favors children remaining permanently in the paternal household.

A young man begins to develop adult working and reproductive skills, but does not have autonomy to exercise them. Parents maintain control over their children's actions to care for their formation and/or benefit from their skills. Evidence indicates that rural youths want to establish households independent from their parents, but frequently they are obligated to defer their autonomy for several years (Durstun, 1998). For example, Levine et al. (1991) find in two communities in central Mexico that some women remain in the labor force and postpone their marriage in order to have an independent dwelling with their couple when they marry and not to share it with his family. In western Mexico, Arias and Mummert (1987) state that participation in the labor market has allowed young women to take decisions within families thus reducing paternal authority and increasing neolocality patterns after marriage. In general, greater education, independent employment, and migration will favor autonomy in the relations with parents.

In rural communities of Yucatan, one main feature of the traditional family organization has been the paternal authority that holds up on the activities about the maize plot, axis of the peasant economy (Lugo Pérez, 1992); in these families, the household head is in charge of administering the resources and he influences the children's decisions. This type of family organization prevailed until before the 70's, when the reduction of the agricultural returns, the lack of sources of employment in the communities and the creation of jobs in other regions of the peninsula propitiated youths to emigrate and establish links with external labor markets, with the consequent loss of the paternal authority. Currently, youths work in the family land and sell their labor force. If the family grows maize, married children remain in the family household for a short time before becoming residentially independent. When the in-laws do not have male children in the community, the sons in law may help them.

In the population under study, we expect the better-educated males with jobs independent from the family and better income to have greater probabilities of marrying and establishing an independent household. Among the women, we will put to the test

¹⁵ In a paper on female migration to Latin American cities to work as domestic help, it was found that domestic service jobs provide a certain autonomy for rural youths, getting away from their families of origin. Many families allow it because they are jobs where the basic needs for room and board are covered, i.e., they are more protected than if they were independent. However, in these jobs there are no opportunities for progress or training (Jelin, 1977).

which of the two explanatory models is better adapted to these communities, where poverty and discrimination against them prevail.

In traditional societies as the rural communities in the Yucatan peninsula, youths are not expected to leave the parental home before marriage because of independence reasons, and it is assumed that childbearing takes place within the conjugal unions.¹⁶

Values and traditions have a decisive influence on family transitions, so we are interested in ascertaining the differences between Mayan and mestizo youths. There is tremendous cultural diversity and heterogeneity in the Mexican indigenous population. But one trait that is found to a lesser or greater degree in all of the ethnic groups is their hierarchical and patriarchal organization, wherein women and youths play a subordinate role. Among Mayan males, it is expected that once education, occupation, and income are controlled, there will be no outstanding differences in marriage timing between them and the mestizos. On the other hand, among the females, even after controlling the poverty effects, there will continue to be earlier marriage among the Mayan girls.¹⁷ Due to the hierarchical and patriarchal features of the Mayan families, it is expected that youths will take longer to become independent from the family household.¹⁸

To a large extent, community economic, social, and demographic conditions determine the resources and opportunities available for youths to make a particular transition. Higher wages and income in the locality allow youths to marry and form an independent household at earlier ages. In localities where wage work and work other than agricultural exist, young people will also marry earlier and form an independent household. Additionally, in those localities where there is less poverty, where families have greater landholdings and better quality soils, and in those with job opportunities outside agriculture, youths will tend to marry earlier. Furthermore, when the families have better lands, the male children will tend to remain in the family household after marriage. The availability of potential companions with favorable labor characteristics influences greater nuptiality of females as well as males.

The importance of the female contribution to household subsistence in the locality makes life for the new couple more accessible and accelerates male entry into union in an independent household. Furthermore, in contexts where the women are more educated, the males will marry at an earlier age.

The isolation of the rural communities hinders change to the traditional values and attitudes and limits educational and job options for the youths. Mass communications media and migration are important sources of communication with the

¹⁶ It is a common thought that in Latin America young girls remain as virgins until marriage and that childbearing occurs within marriage. In most countries this is not the case. However, in Mexico only 4% of rural women declare to have had a birth before marriage (Heaton, Forste and Otterstorm, 2002).

¹⁷ In a study on schooling among the youths from marginal and very marginal localities in the Yucatan Peninsula, significant gender differences can be seen among the indigenous groups (Mayan speakers). Indigenous males attend school more than non-indigenous speakers, while indigenous females attend less and achieve lower educational levels than non-indigenous females (Rabell and Mier y Terán, 2003).

¹⁸ Goldscheider and DaVanzo (1989) observed in the United States that minority youths have a lower probability of abandoning the parental home than their WASP peers.

outside, which promote values that tend to delay marriage (Heaton, Forste, and Otterstorm, 2002). Similarly, these are expected to favor autonomy of youths from their family households. Locality size is also a good indicator of isolation, since it has been found that the very small localities are almost always located the furthest from urban centers and with deficient means of communication (Aguilar and Graizbord, 2001).

Traditionalism in the communities will promote youths, both male and female, to promptly begin their life in union, and for males to postpone their autonomy with regard to their family of origin. In the predominantly indigenous communities, where job options outside subsistence agriculture are very limited and where gender differences in education are accentuated, youths are expected to have traditional attitudes towards forming unions and towards residential independence from the family household.

Finally, availability of adequate potential companions in the locality influences union formation. According to the search models, inequalities in the sex ratio affect males and females differently. An excess of males gives rise to a greater tendency for union among males and females: females are more economically dependent and males must be committed to be able to obtain a partner (Parrado and Zenteno, 2002). According to the new household economics model, on the other hand, an excess of males favors a reduced tendency among males but a greater one among females.

Data Source and Methodology

The source for the data is the *Encuesta de las Características Socioeconómicas de los Hogares* (Survey on Socio-economic Characteristics of Households, ENCASEH), carried out by the Departments of Health, Social Development, and Public Education, within the framework of the *Progresa* social program. This information was gathered between 1996 and 1999, and was the basis for selecting the families that would receive Program benefits. Questionnaires were applied to all households in each locality.¹⁹ On the Yucatan peninsula, around one million individuals were surveyed, belonging to 167,000 households in 1,424 localities.²⁰ ENCASEH includes information on localities with high and very high marginality, with more than 50 inhabitants and less than 15,000, and with school and health services within 10 kilometers.

In this study, the population analyzed consists of the individuals between 12 and 34 years of age. We selected these ages as limits because a large part of the transitions within the family milieu occur within this age range. On the Yucatan peninsula, the population in these ages in the ENCASEH is around 350 thousand persons, with similar numbers of males and females.

The data source is from one point in time, so that it is not the most appropriate for a life course focus. However, the study is valid for two reasons. The first is that there are no longitudinal sources for analyzing youths in Mexican marginal rural communities.

¹⁹ Locality questionnaires were also collected. Unfortunately about one-third of the localities do not have this questionnaire data, so that we could not use these data.

²⁰ Interviewed localities are distributed in the whole region. In Campeche, interviewed localities are found in the 11 municipalities of the state. In Yucatan, there are 106 municipalities and only two had no localities interviewed. In Quintana Roo there are eight municipalities, two of them are islands where no data was collected.

The second is that the source provides or allows us to deduce crucial aspects in adult life transitions: age at dropping out of school, age at first entry into the labor force, and at the time of the interview, kinship relation to the head of household, marital status, shared living accommodations with a conjugal partner, and shared living accommodations with parents and children and children's ages.²¹

These data do not allow us to ascertain the path followed by each individual to reach the set of social roles that s/he has at the time of observation. However, the status of the universe of youths with regard to their adult roles provides a good approximation of the most frequent paths adopted for acquisition of these roles.

A bivariate analysis was carried out on the ages at which the transitions occur in public and private life among the different generations.²² School system expansion in rural localities over the period that separates the first generations analyzed (1964) from the latter (1986) prevents us from supposing that there is stability over time in the life course of these generations. On the other hand, we are unaware whether the growing labor force participation by women in the country as a whole after 1970 and the delay of marriage have also reached the youths in this study. It is not possible to assume that cross-sectional observation of the population at different ages can be assimilated to a longitudinal observation. Nevertheless, point analysis does provide an approximation to patterns of behavior by age.

In the multivariate analysis, two of the three transitions to adult life were taken into account. We analyzed the formation of the conjugal union because often it is the family transition that causes the other two, as will be seen further down. The departure from the family household is of great interest in the context of rural poverty, because it shows the strategies developed by families to delay the departure of young manpower; furthermore, this delay allows youths in precarious conditions to accumulate sufficient resources to reside outside the family household and achieve greater autonomy with regard to their parents. In the bi-variate analysis of the first part of this study, the central focus is on the transitions of youths as individuals, and it was assumed that the young person had left the family household whenever he did not live with his parents. However, we believe that leaving the own family household in order to go to live with the in-laws is a transition that is not linked with the independence acquisition assumed in the adult role. Therefore, in the second part of this study, the analysis is focused on describing and explaining the marriage and residential independence patterns, that is if the couple has formed its own household with the adult roles of head and conjoint.

In the statistical models, the arrival of the first child was excluded, since in this context it is not dissociated from the formation of the marital union. Once the conjugal couple has been formed, the arrival of children is more a question of time than of

²¹ In the ENCASEH there were no questions on fertility. However, parents may be identified for each member, whenever they live in the same household. In these localities, the great majority of children lives with both parents and we may assume that only young people living with their children have adopted their role as parents.

²² In the analysis of school dropouts, only those youths that had ever attended were included. In the bivariate analysis of residential arrangements, youths were considered still in the family household when the kinship relation with the head of household was child, grandchild, adopted child, or stepchild.

abilities or opportunities for the young couple; in addition, on occasion, the couple is formed because there is pregnancy or birth.²³

We applied multinomial logistic regression models to study the probability of having formed a marital union and of living in an independent household.²⁴ Only those youths that are heads of household or spouses of heads are considered to have residential independence. We used a model for males and another for females, because we considered that the individual and contextual factors influencing the transitions for males and females were different. We analyzed marital union formation, since this is the transition that generally is the source for the other two transitions. No distinction is made between consensual unions and marriages, because there is no fundamental difference in their natures.²⁵ The cross-sectional data allows to link the explanatory variables referring to different timing with the marital and residence current status. For example, in the case of the age variable, it is not possible to follow an individual and see how his risks of marriage and living arrangements change over time; what is known is how these risks change with age and birth cohort in the whole population. This imposes caution in the interpretation of the results, mainly of the explanatory variables that may vary as a result of a change in the marital status. This is the case for female current work because often women abandon the labor force when they get married and have their children.

In order to characterize the background of the youths, schooling, type of labor activity, position in the occupation, labor income, and ethnic origin were taken into consideration.²⁶ Furthermore, since the source compiled data on all of the households in the locality, on the basis of the set of all households, it is possible to ascertain important traits in the local context in which the youths develop.

The following paragraphs present the operationalization of the variables in the models and Table 2 in the Appendix presents the descriptive statistics.

The dependent variable consists of three categories: single (0); in conjugal union in his or her family household (1); or, in conjugal union in an independent household as head or spouse of head (2). No distinction was made between those who were single

²³ The postponement of the birth of the first child is uncommon in Mexico, mainly in the rural localities. In these localities, only 5% of married women in the reproductive ages and without children use contraceptives in 1995; this proportion is 53% among those with one child and 62% among those with 2 or 3 children (Hernández, 2001)

²⁴ In the models, youths are considered as residing in the family household when their kinship relation with the head of household is any of those mentioned in the preceding note, or they are a son- or daughter-in-law. Those living in the household of other relatives are the ones with other kinship relations. These latter were not included in the model, because we do not know the motive for a youth's presence in the household: orphanhood, migration, or other.

²⁵ Frequently, couples in consensual unions do not legalize their unions because they live far out of town or because they cannot pay for a formal ceremony. Additionally, in Mexico, the legalization of consensual unions is very common (Parrado and Zenteno, 2002).

²⁶ The characteristics of the family household are not analyzed here, because information is only available for those still living there.

living at home and those living alone, because these latter were very few, among both males and females.²⁷

Some of the explanatory variables have a positive influence on the probability of being in union and of setting up an independent household and others a negative influence. Of the individual characteristics of the youths, age and years of education are discrete variables without any transformation. The variable 'ever worked' is dichotomic, and the responses are no (0) and yes (1); 'currently working' is also dichotomic with the same categories. Agricultural labor, wage-earner, and family-worker are also dichotomic variables, where the first category is not working or does not have this type of work. Weekly income from work is a continuous variable that reports zero when the person is not working or works without pay. Indigenous language is dichotomic, with the categories: only Spanish speaker (0) or speaker of some indigenous language, whether or not Spanish is spoken as well (1).

We grouped the contextual variables into four major groups, which are not exclusive: economy, isolation, traditionalism, and demographics. Some of the variables can reflect elements of more than one group; so that to group them the most relevant linkages were selected to place them in the corresponding group, nevertheless, in the analysis an attempt will be made to provide a less schematic perspective.

Characteristics of the local economy are those providing job opportunities for the youths: proportion of workers in agriculture, wage-earners, un-paid family workers, households with irrigated lands, average agricultural wage, and average total income by earner.²⁸ Local isolation was manifested by the size of the locality (less than 500, 500 to less than 1000, 1000 to less than 2,500, and 2,500 to less than 15,000) and the proportion of households with permanent migrants in the municipality;²⁹ the municipality was selected here since other studies have found that the scope of migration extends beyond the locality (De Janvry and Sadoulet, 2001). The variables linked to traditional values are the proportion of women working among the total workers in the locality, the proportion of households with land, the proportion of heads of household that speak Mayan, and the female literacy ratio (proportion of literate women 15 to 34 years divided by the proportion of literate males in the same age group).³⁰ Finally, the balance between available males and females of marriageable ages (15 to 34 years) is the indicator of the marriage market, which, when combined with some of the educational

²⁷ Married youths whose spouse did not live in the household were excluded, because it is unknown whether this is an erroneous declaration, or they are migrants who may return or not.

²⁸ In an attempt to measure the effect of household poverty, we introduced two variables on household poverty in the locality: proportion of earthen floor dwellings and of households with small land-holdings. The results showed that it is more plausible to interpret this relationship in an inverse sense, to wit, by having more couples setting up an independent household at early ages, and with scant cumulative resources, it propitiates an increase in the proportion of households in precarious conditions within the locality.

²⁹ In order to assess another aspect of the communication with the outside, the proportion of households with radio or television set in the locality was introduced to the models. However, the variable was not included because, as was the case of the household poverty variables, it reflected the residential patterns of young couples: low proportions of households with radio or television set were highly linked to neo-local arrangements.

³⁰ In an attempt to include a variable on fertility as another mean to assess the traditional values, the child women ratio was introduced into the models. The variable was excluded because it showed the nuptiality timing but not the fertility level.

and labor characteristics in the locality, indicate the actual opportunity for youths to get married.

Results

Transitions to adult life

In order to relate the timing of the transitions in the public domain and in the private life, the five transitions that shape the transition to adulthood are briefly analyzed. Data show different timing in the transitions by gender (Figure 1). Among males, a temporal independence can be seen between the transitions in the public domain and those occurring in the family sphere. Additionally, in the core of each domain, there are close temporal links among the transitions: young males leave school and start working almost simultaneously, and the three family transitions take place in a short period. Among women, family transitions also occur within a short period, but they take place earlier in their lives; in the public domain, young women leave school earlier and participate less in the labor market.

Many youths from these rural localities live a youth of deprivation due to poverty, isolation, and ethnic and gender discrimination; they suffer privations in their possibilities for learning, and personal development.³¹

Youths leave school at early ages. At age 12, 8% of the youths are no longer attending, and after age 13, when the majority complete primary, a slow drop-out process continues, which accelerates at age 15 and 16 years, when they complete secondary education; at this last age, only half of the youths are attending. In the following ages, the decline continues, and at age 18 only one of every four youths is attending. After age 23, practically no one is attending school.

Their working life begins soon after leaving school. The early age at which they begin to work is noteworthy. At age 12, 10% of the children have already worked, at 14, almost 25% have worked, and at age 18, a majority of the youths (70%) have worked.

Girls leave the school earlier than the boys do. At age 12, only 87% of the girls are still attending school, and after that point the tempo of their dropping out of school increases. By age 15, less than half of the girls are attending, and by age 18, one in six.

In contrast to what occurs with the males, among the females there is no close temporal relationship between dropping out of school and starting their working life. In spite of the fact that females drop out of school at an earlier age, a smaller proportion of them begin their working life in each age group than among the males. At age 12, 7% have worked, at age 14, 15% have done so, at age 20, only 40% have worked. After this age, the proportion of women that have worked remains constant. If we analyze the proportion of females currently working, we find that after age 18 it remains constant: one of every three females participates in the labor force. In addition, on comparing

³¹ Secondary studies are becoming an ever-more popular option for these youths, at an age when they are defining their aspirations and expectations, and are planning their adult lives (ECLAC, 2001). Health and educational institutions provide opportunities for improving abilities among the poor (ECLAC, 2001).

these two variables relating to the different timing of work, we can see that the discontinuity – have worked but do not currently work - increases by age, due to leaving work to start-up families and greater time of exposure; one in three women that have ever worked has discontinuous work. Greater school attendance among more recent generations is not reflected by greater labor force participation: a large proportion of young women (60%) from these localities has never participated in the labor force, although women that do work have a relatively continuous working life.

Rural youths adopt family roles as adults at early ages, especially the females. In addition, there is tremendous temporal coincidence among the three transitions. At age 17 years, more than 20% of the girls have started a marital union and abandoned their family household, and a year later, almost the same proportion has undertaken their maternal role. Males achieve these proportions approximately three years later. Between 20 and 21 years of age, one-half of the females have left the parental home and have formed a conjugal union; at age 23, one-half have assumed their roles as mothers. Among the males, median ages are about two years older. When the females are 27 and the males are 29, more than 80% of them have made the transition into their adult family roles.³²

Now we are interested in having a perspective on the transitions that each youth has undergone, to visualize the paths followed in adopting the role of adult within the family milieu.

Paths toward adult family life

The marital status of the youths from these rural locations defines to a great extent the adoption of adult family roles, both among males as well as females (Table 1).³³ Before forming a conjugal union, young people rarely have undergone any other family transition. Almost all single males live in their family household (95%), very few live in the households of other relatives (4%), and practically none is head of household (1%). Usually, the single individuals have no children, in particular the males.

A great majority of those who are married, on the other hand, live in an independent household and have children. The only clear gender difference is among those that do not constitute an independent household. In these cases, the males remain more in their family household (11%), and reside less frequently with other relatives (5%); females, on the other hand, remain less in their family household (5%) because they go to live in their spouse's family household (9%).

³² Age preference for 30 years in the declaration is probably the cause for this irregularity in the curves. This erroneous declaration is found primordially among single males, in the family household, without children, aged 29 and 31 years.

³³ From this point forward, the study is limited to single youths and to those currently in union. It excludes those with interrupted unions, because they have different residential and formational patterns for their descendents and, in addition, constitute few cases: less than 1% among males and 2% among females.

Once the key role played by the formation of a conjugal union is shown, it is interesting to delve into the concurrence of the three transitions and their variation by age (Figure 2 and Table 1 in the Appendix). Males spend most of their time (60%) between ages 12 and 35 as bachelors in their family household and without children. The time passed, having undergone only one or two family transitions, is relatively short (17%). A short time after, they have moved on to assume the three adult family roles: in union, in an independent household, and as father (27%). At age 22 years, 20% of the youths have assumed the responsibility of provider for their partner and towards their children in an independent household, at age 25 years, one half as done so, and at age 33, 80% fall in this category.

The earlier transitions among the females mean that they spent only half of these youthful years in the household single and without children, and somewhat more than one-third of these years (35%), having formed a conjugal union, in an independent household, and with children. The time spent by females in other stages on their path to adopting an adult role within the family milieu is short (15%); as in the male case, there is a tremendous temporal coincidence in the three transitions.

The frequency and age patterns of the "intermediate" stages provide elements of interest on the paths adopted by the youths in their transition to adult family life. Particularly, it is of interest to know if the pattern of the normative sequence – marriage, parental family departure, childbearing - is generalized, or if there are deviations from it.

The young men who are single and do not live in the family household are few and frequently are very young and reside in another relative's household; they almost never form an independent household in which they are the heads; even after age 30, there are few who remain single and that are heads of household. As could be expected, single males practically never live with a child.

Single women, as was the case with the males, remain to a great extent in the family household, and some live in a relative's household; after age 30 years very few of the women who have not formed a conjugal union are heads. Only 2% of all single women are mothers. However, among the older single women, motherhood is much more common: after age 30 years, one of every five single women has children. When this happens, some of the girls stay in the family household (55%), other go to live with other relatives (14%), or what happens with some degree of frequency, they form an independent household (31%). Residence for single mothers depends in part on their age, and probably on the age of their children: when the mothers are very young and their children little, it is difficult for them to form a residentially independent household. In spite of this, at age 18 years, of every four single mothers, one has already established her own household, two live at home with their parents and one in a relative's household; after age 30 years, half of the single mothers are already heads of household.

Among those married, one of every six youths has not set up their own residentially independent household. The most common situation is that the male

children stay in the family household after marrying (11% of those married), whether they still are without children (5%) or have already begun their families (6%). When they marry at very early ages, the proportion remaining in the family household is very high, but declines rapidly as their ages increase. Among those already married at age 18, one in three live in the family household; at 23 years, this proportion has dropped to one in six, at age 30 it is only one in 20. This significant reduction by age shows that the residence of married children in the paternal household is but a stage in which the young couples collaborate in the economy and domestic chores of the family household, at the same time that they acquire the resources necessary to achieve residential independence.

In contrast, married women rarely stay in their family households. Only those few that marry at very early ages, 12 or 13 years, remain in their family homes; at other ages, this proportion is much lower, and declines rapidly with age; for example, at age 23, only 8% of the married daughters continue to live in their family household. Residence in the spouse's household is also age-related. Between the ages of 13 and 20 years, the proportion of married females living in the household of other relatives, almost always with the spouse's family, is high, varying between 20 and 30%. Later, it declines and at age 30 only 3% of the married women, a great majority with children, remains in the in-laws' household.

Summarizing, the normative sequence is generalized although with some exceptions. Some young single people do not live the parental home but live with other relatives. This could be the result of their parents' mortality or out-migration or of their own seek of labor or educational opportunities; trends with age suggest that the search of educational facilities is more common among young males. The case of young single mothers is not common but it implies that besides marriage, motherhood is another way to gain independence from the parents, given that young single mothers are often heads of their households. Also, some young couples remain in the parental household, but this is mostly temporary as a first stage of their life as couples.

In the following paragraphs, the aim is to describe and explain if the young person lives in couple and if the couple has formed a household of their own. Before presenting the model results, it is important to characterize the youths by their abilities and the opportunities available to them within their context, in order to gain greater background on how they influence the process of transition to adult family life.

Characterization of the youths and of their local context

As has already been seen, between age 12 and 35 years, a majority of the youths have still not established their conjugal union, particularly among the males (Table 2). Of those married, a majority lives in their own household, although one of every seven remains in the family household of either of the two.

The educational and labor features show the deprivation of capacities and opportunities young people suffer, as well as the strong gender inequalities. The population under study averages 21 years of age with low schooling, especially among the females, who on average have not completed the six years of the primary cycle (6 years among males and 5,4 years among females (Table 2 of the Appendix)). It is much more common for males to commence their working role than females, two thirds of the males and only one third of the females have worked at some time during their lives. The gender difference among those currently working is even more accentuated, since some of the females abandon the labor force. Labor force participation in agricultural activities is very frequent, more than one-half of the working males and slightly less than half of the working females are involved in agriculture. Two-thirds of the male workers receive wages; this condition is less frequent among the females. Almost one third of the females work on a family plot or in the family business without compensation of any type, but there are few males in this employment situation as well. In general, the average income perceived is very low, especially by the females due to the unpaid family labor they perform.

In these rural localities in the Yucatan, the Mayan presence is very important: more than one half of the youths speak the autochthonous language.

With regards to the context in which the youths live, some reside in extremely small and isolated localities (40% live in localities of less than 1000 inhabitants), while others live in localities that could be considered as semi-urban (33% live in localities of 2,500 to less than 15,000 inhabitants); there is a slight gender differential, as it is the females that live in the larger localities. The localities are predominantly agricultural; more than half of the workers are dedicated to agriculture, a proportion that coincides with that of the working youths. Wage labor in the localities is slightly over 50%, a proportion showing that youths are more frequently wage-earners than the rest of the population. On the average, 11% of the workers in the localities do not receive remuneration, which shows that the youths are not the only ones in this occupational situation. Female labor force participation is important, since one of every four laborers in the localities is female; it is worth noting that among youths this proportion is somewhat higher. Average agricultural salaries (171 pesos per week), as well as the total income by wage earner (202 pesos per week) are very low, but considerably higher than those of the youths.³⁴ The conditions of their dwellings are precarious, 22% of the households occupy a dwelling with earthen floors, and only two of three households have a water-seal toilet in the dwelling. Four of ten households have land for cropping; this proportion shows that they are peasant communities, but also shows that a majority of the households do not have their own land, and explains the importance of wage labor in the localities. Practically none of the plots in this region (2%) are irrigated, almost all of them with temporal crops, with the low and unstable yields associated with this kind of land. More than two-thirds of the heads of household

³⁴ In the Yucatan peninsula, by the beginning of 1998, the official minimum salary was 26 pesos per day and 30 pesos by the end of the year. The mean salary in these rural marginal localities is close to the minimum salary of the region. It is worth noting that the minimum salary constitutes the base of the wage scale and not a sufficient amount to satisfy the basic family needs.

are Mayan speakers, a proportion much higher than that found among the youths, which shows the loss of the indigenous language among more recent generations.³⁵ Generally, in the Yucatan peninsula out-migration without return is not very common, five households of every thousand in the municipalities have migrants that have left in the last five years and that have not returned;³⁶ however, there is a great variation between municipalities, given that there are some that have no migration of these type, while there is one where more than 4% of the households has definitive migrants.³⁷ The female literacy ratio with regards to that of the males corroborates the better condition of the males with regards to average education, although there are cases in which the relationship is inverted. Finally, the sex ratio of the population in marriageable ages is slightly above one, which shows that if there is emigration to the larger localities, this is not sex selective.

Multivariate Models

The results show interesting aspects of the conditionals of nuptiality and of the family arrangements of young couples. The fit of both models is good, but that of the males is better (Table 3 in Appendix). This is due to the fact that the decision to form a union and the later residential arrangement falls more on the male and his background and opportunities than on the females.

Relative risk ratios of being married in the parental home and of being married in an independent household with being single as the reference category for males and females are shown in Table 3.

From the individual characteristics, the age effect corroborates that females are on an earlier calendar for beginning a union, and among those married, those remaining in the family household the longest are the youngest. This shows, with the bi-variate analysis that remaining in the family household after marriage is mostly temporary and that as the children gather the necessary resources, they form a household of their own.

The years of schooling completed hold an obvious inverse relationship to three of the four cases. As could be expected, timing of female union formation is more sensitive to schooling than that among males: by increasing schooling, females delay the initiation of a union more than the males. In the case of young women, these results support the hypothesis of the specialization model, while young males may postpone the other transitions in order to facilitate their educational achievements. One unexpected result is that the likelihood of being married in an independent household is the one reduced the most by increasing years of schooling. One possible explanation may be that, among those that will continue to reside in the family household after marriage, education will have little impact. Another could be the fact that remaining in

³⁵ Frequently the households have access to modern mass media: two of every three households have a radio or a television set.

³⁶ In the rural marginal localities of the whole country, this proportion is two out of every thousand.

³⁷ On the average, there are six children under five years of age for every ten women in reproductive ages, which shows high fertility levels.

the family household would allow some married youths to continue with their studies; however, married young people seldom attend school.

'Ever having worked' is the variable with the greatest influence on nuptiality among males, especially those residing outside the family home. This is a clear indication that young males without working experience have less possibilities of marriage, especially if they want to form an independent residential household. The higher likelihood of having formed a conjugal union among the females with work experience corroborates the hypothesis that they are the most attractive candidates in the marriage market.

The effect of 'currently working' is lower, but significant in all four cases. In the males it was expected, due to their role as provider for the household, especially when it is an independent household. In the female case, work and marriage are incompatible: frequently working females will abandon their work activity when they enter a union and become mothers.

Type of work also has a significant relationship with transitions in the family milieu. Among the males, being a wage earner, and, especially, being an un-paid family worker are associated with a reduced likelihood for being in union, principally in an independent household. It is likely that wage workers will postpone marriage in order to accumulate enough capital to establish an independent household. It is interesting that unpaid work is linked to lower risks of remaining in the parental home because it shows that when young males stay in the family household they do complementary activities to those of the head. Among females, the relationship is different and more complex. Those working in agriculture have a greater likelihood of being married in the family household and less of being married in an independent household. This means that married women that remain in the family household frequently perform agricultural labor. For those having paid employment, the likelihood of being married is very low, especially of being married and residing in an independent household. It is noteworthy that having un-paid employment on a family plot or business increases both the likelihood of being married and in particular in her own home. Everything seems to indicate that for married women, it is difficult to participate in economic activity, unless this is in un-paid jobs in their own home, or in agriculture on a family plot.

According to both nuptiality models, male income has a significant effect on the likelihood of forming a conjugal union, whether residing in the family household or in an independent one. Among females, so few receive remuneration after marriage, that it has no effect at all.

Different from proposed, after controlling for education and work, young Mayans are more likely to be married in an independent household. As had been hypothesized, the effect of an indigenous language is greater among females. Indigenous language speaking females marry at earlier ages and have a greater likelihood of remaining in the family household.

Among the contextual variables, size of locality has interesting effects, since they are not linear, as is frequently supposed. In the very small localities (less than 500 inhabitants), men have lower risks of being in the parental home; it is likely that some of these localities were recently formed, and that parents' lands do not prevail. Not as expected the likelihood of being married in an independent household does not vary by locality size. Among females, only in localities from 500 to less than 2 500 inhabitants, the risk of being married in the family household is greater than in the more dispersed communities. Greater locality size does exert a dissuasive effect on females being married in an independent household.

In those localities where a large proportion of the workers are involved in agricultural labors, the probability that those married will stay in the family household is much lower, especially among the males. This can be related to the lack of complementarity among the different activities and to a greater available labor force for working on the family's plot. The proportion of wage-earners has no significant effect, except for young women who delay marriage in an independent household when they have better job opportunities. On the other hand, un-paid family work, which would be an indicator of a lack of opportunities, favors early marriage among males. This is the case, because these jobs are the only ones that married women can carry out, which means males may move the formation of their unions forward, mainly those with independent residence.

Greater frequency of female labor in the locality means that males delay their conjugal union. When females have more opportunities to work, they have less interest in forming early unions, which would oblige them to leave their jobs, so that the males will have to wait to marry them. Among females, on the other hand, once their working experience and current working condition have been controlled, greater job opportunities in the localities make them postpone their marriage if they are to form an independent household.

Better agricultural wages in the community favor the likelihood of being married in an independent household and reduce the likelihood of marrying and remaining in the family household, for both males and females. This is similar to what was found in other contexts with regard to the preference for independent household formation, when economic conditions so allow. Besides, when total income per earner increases, that is when non-agricultural income raises, the risks of being married in the family household also decreases.

The greater the proportion of households with lands, the higher the proportion of early marriage of children and their continuing residence in the family household. irrigated land, on the other hand, is a good indicator of land quality: having the best lands in the locality promotes early marriage by male children and their remaining in the family household.

Of the variables related to traditionalism, the ethnic composition of the localities affects in an interesting and complex way, given that it is also related to the ethnic

condition of the young person. The greater the indigenous presence in the locality, the higher the likelihood of males, speakers of an indigenous language as well as non-speakers being married in the family household. This is not the case among young women, suggesting that young males in the more indigenous localities marry young Indian girls who have higher risks of being married in the family household. In contrast, a greater indigenous presence is related to lower risks of being married in an independent household. This, together with the fact that Mayan boys are more likely to be married in an independent household suggest that the mestizos, when they are the minority, postpone their marriage, especially women. .

Migration has a very large and significant effect on the likelihood of marrying and establishing an independent household. Both males and females have a much lower likelihood of marrying and of living in their own household when migration is intense. This may reflect a real postponement of marriage; however, it could also reflect that when the youths marry and set up their own independent household in those contexts where there is migration, they themselves become migrants and leave the field of observation of this study.

The ratio between the proportion of literate females and males clearly showed that, when women enjoy a relatively better situation, the likelihood of marriage drops among the males, especially for establishing an independent household. One possible explanation is that when females have higher schooling than males, they consider the less-schooled males in the locality unattractive candidates.

Finally, the sex ratio in the locality has a very important effect on union formation. An excess of males promotes a greater likelihood of union formation among the females, but a lesser likelihood among the males. This gives support to the specialization model and points out the relevance of the local marriage market.

Final Considerations

Within the context of poverty in which the youths in this study live, an analysis of the adoption of adult roles allowed us to show the shortfalls in abilities and opportunities that limit their possibilities in the following stages of their lives.

Dropping out of school occurs very early for a majority of the youths. This dropout occurs frequently before they have acquired the skills necessary to opt for a better job. Their entrance into the labor force occurs a short time afterwards. For several years, this leads to their contributing their manpower or their income to the family household economy, or to females doing household chores.

Transitions within the family milieu take place at early ages and simultaneously or with little difference in between and generally follow the normative sequence. These transitions frequently imply acquisition of autonomy with regard to parents. Most of the youths that marry form an independent household. Nevertheless, occasionally, after marrying, the children must continue to live in the family household, because within the

locality there are no opportunities for the new couple to become independent (low wages and income), or because the peasant families organize their economy around the complementarity of father and son labor. Much less frequently, because the family irrigated land makes it attractive for the youth to work on the parental plot.

Gender is the most important aspect differentiating transition to adult life for youths in marginal rural localities. In public life, females drop out of school earlier but enter the labor force less frequently than males. In family life transitions, there are also differences in scheduling, but especially with regard to the disadvantaged conditions in which the females are found.

Among the males, greater schooling, associated with higher job and economic expectations, delays the initiation of conjugal life. On the other hand, a more secure economic situation (currently working and greater income) ease marital union formation, particularly in independent households. A secure economic situation makes them more attractive candidates, but is also what allows them to marry and establish an independent household.

Like the males, the females with greater education postpone marriage, and their work experience facilitates the initiation of a conjugal union. This latter can be explained because they are better candidates on the marriage market. However, current work, which also means labor continuity, is associated negatively to marriage. It is paradoxical that, due to the fact that they are working, single females have a higher probability of marrying, and once married, their possibilities of continuing to work are minimal, unless they are un-paid workers or agricultural workers on the family plot.

In the relation between males and females, it is interesting to see that when they have a relatively better condition within the locality (high female participation in the economy, lower educational disadvantage with regard to males), the likelihood for males to marry declines, especially for remaining in the family household. This seems to support the theory of gender specialization within the couple. The females, by having fewer disadvantages with regard to skills and opportunities versus the males, are less dependent and can opt for delaying marriage, especially if it means remaining in the family household afterwards.

In these societies where gender roles are deeply differentiated, the model based on the new home economics theory is particularly adequate to explain nuptiality patterns. The only exception is the work experience of the young girls. The model states that work experience will make women less dependent on men but, as counterpart, they are more exposed to socialize with young men outside the household.

The youth's ethnic origin and the indigenous presence in the community interact interestingly. In the predominantly indigenous communities, young males have higher risks of being married in the family household with Mayan girls. Also, the young mestizos, when they are a minority in the community they postpone their marriage in an independent household, especially women. To have a more in-depth understanding of

this subject, an analysis of the endogamy in the marriage patterns within the Mayan population would be needed. If a high degree of endogamy prevails among males and females, an ethnic criterion should be incorporated to the sex ratio in order to better reflect the marriage market conditions for Mayans and mestizos.

Finally, the relevance of the distinction of the living arrangements of the young married people in these rural marginal localities should be pointed out. Although our data does not allow distinguishing between the young couples' paths to form an independent household, the effect of the explanatory variables differs by the couple's living arrangement. The individual characteristics' effect has similar sense, although generally stronger on the living independently category, showing the importance of the individual's features on nuptiality. However, the local context variables have different effects on the living arrangements of the young couples. The economic opportunities motivate young people to marry and form their own household and deter them from remaining in the family household after marriage. Also, the organization of the family economy about the plot allows young people to anticipate their marriage and remain in the family household but has no effect on couples forming their own household.

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Table 1
Stages in the Transition to Adult Life, by Marital Status and Gender

	Single		In union	
	Males	Females	Males	Females
In parental household	94.8	94.8	11.2	5.0
In other's household	3.7	3.9	4.5	9.3
Head or spouse	1.5	1.3	84.3	85.7
Total	100.0	100.0	100.0	100.0
With children	0.2	1.8	84.4	86.7
Without children	99.8	98.2	15.6	13.3
Total	100.0	100.0	100.0	100.0

Table 2.
Single and In Union Youths, by Place in Household,
According to Gender

	Males	Females
Single	64.0	54.5
In union in family household	5.4	6.0
In union in independent household	30.6	39.5
Total	100.0	100.0

Table 3.
Multinomial Logit Models Applied to Youths Aged 12 to 34 Years to Model
the Probability of Marrying and Living in the Family Household
and of Marrying and Having Residential Independence[&]

	Relative Risk Ratios (exp(B))			
	Males		Females	
	Mar fam hh	Mar indep	Mar fam hh	Mar indep
Individual characteristics				
Age	1.230	1.403	1.291	1.475
Years of schooling approved	0.996	0.938	0.939	0.886
Ever worked	5.992	12.608	2.387	2.479
Currently working	1.840	4.836	0.119	0.179
Working in agriculture	1.042	0.949	1.667	0.892
Working as wage-earner	0.835	0.843	0.534	0.239
Working as un-paid family worker	0.436	0.135	3.054	4.382
Income from work	1.001	1.001	1.000	1.000
Mayan speaker	0.992	1.144	1.252	1.211
Local context characteristics				
Size of locality: from 500 to 999 *	1.209	1.014	1.166	0.996
from 1,000 to 2,499*	1.299	0.949	1.209	0.854
from 2,500 to less than 15,000*	1.257	1.122	1.120	0.853
Proportion agricultural labor	0.320	1.289	0.400	1.053
Proportion wage labor	0.799	0.820	0.991	0.728
Proportion un-paid family work	1.991	3.517	0.947	1.128
Proportion female work	0.435	0.174	1.599	0.475
Average agricultural wage	0.998	1.001	0.998	1.001
Average total income per earner	0.997	1.000	0.998	1.001
Proportion households possessing land	2.213	0.816	1.960	0.926
Prop households with irrigated land	2.740	0.770	2.421	0.515
Prop households with indigenous heads	1.244	0.652	0.864	0.418
Prop migrants in municipality	0.012	0.0002	0.063	0.001
Ratio female-male literacy	0.372	0.160	0.632	0.356
Sex ratio 15-34	0.341	0.319	2.041	2.134

[&] Reference category: single persons. Values in boldface have $p < .05$

* Reference category: less than 500 inhabitants.

Source: Table 3 in the appendix.

Appendix

Table A.1

Males

Paths to adult family life

Age	no transition	sing fam hh chi	sing ot hh nch	sing ot hh chi	sing indep nch	sing indep chi
12	96.74	0	2.62	0	0.2	0
13	96.4	0.01	2.87	0	0.25	0
14	96.27	0.03	3	0	0.27	0
15	95.68	0.03	3.31	0	0.34	0
16	94.89	0.04	3.24	0.01	0.37	0
17	91.69	0.03	3.79	0	0.65	0
18	87.72	0.03	3.46	0	0.87	0
19	79.22	0.06	2.85	0.01	1.03	0.01
20	70.48	0.11	3.12	0	1.15	0.01
21	59.9	0.12	2.28	0.01	0.89	0.06
22	53.54	0.13	2.28	0.04	1.31	0.06
23	40.17	0.12	1.86	0.04	1.15	0.06
24	34.96	0.2	1.67	0	1.14	0.05
25	29.25	0.09	1.9	0.06	1.42	0.07
26	24.65	0.16	1.42	0.05	1.52	0.07
27	19.42	0.16	1.4	0.09	1.28	0.14
28	18.19	0.09	1.48	0.05	1.31	0.14
29	12.39	0.04	1.19	0.02	1.15	0.08
30	16.12	0.1	1.33	0.04	1.59	0.04
31	8.58	0.06	0.58	0	1.47	0.03
32	9.79	0.06	0.95	0.02	1.49	0.04
33	7.08	0.02	0.72	0.02	1.24	0.05
34	7.46	0.02	0.89	0	0.98	0.07
Total	60.44	0.07	2.37	0.02	0.89	0.03

age	mar fam hh nch	mar fam hh chi	mar ot hh nch	mar ot hh chi	mar indep nch	mar indep chi
12	0.41	0	0.01	0	0.03	0
13	0.42	0	0.04	0	0	0
14	0.38	0	0.03	0.01	0.03	0
15	0.51	0.01	0.03	0	0.07	0.03
16	0.8	0.08	0.09	0.01	0.32	0.13
17	1.42	0.16	0.29	0.07	1.14	0.75
18	2.27	0.49	0.59	0.16	2.28	2.13
19	3.7	1.51	0.72	0.55	4.28	6.05
20	4.31	2.63	0.9	0.84	5.43	11.03
21	4.67	3.89	1.02	1.4	6.49	19.27
22	4.27	4.74	1.26	1.77	6.69	23.91
23	3.74	5.44	1.34	2.27	7.57	36.24
24	3.53	6.24	0.98	2.66	6.84	41.73
25	2.88	5.62	1.13	2.25	6.23	49.09
26	2.63	5.4	0.86	2.65	6.23	54.38
27	1.97	4.81	0.83	2.39	5.55	61.98
28	1.67	4.55	1.09	2.51	5.27	63.65

29	1.74	3.48	0.62	2	4.78	72.5
30	1.5	4.13	0.63	2.01	4.42	68.07
31	1.05	3.27	0.64	1.58	4.51	78.25
32	1.29	3.17	0.69	1.7	4.2	76.6
33	1.13	2.95	0.45	1.8	3.7	80.84
34	0.84	2.01	0.42	1.4	3.99	81.92
Total	2	2.39	0.58	1.07	3.43	26.7

Abbreviations:

sing: single; mar: married; chi: with children; nch: without children

fam hh; family household; ot hh: household of other relatives; indep: independent residency

Females

Paths to adult family life

age	no transition	sing fam hh chi	sing ot hh nch	sing ot hh chi	sing indep nch	sing indep chi
12	96.27	0	2.66	0	0.38	0
13	95.77	0.05	2.78	0.01	0.37	0.01
14	93.54	0.07	3.27	0.03	0.49	0
15	90.35	0.15	3.11	0.02	0.38	0.05
16	84.93	0.3	2.9	0.04	0.41	0.03
17	75.84	0.31	2.98	0.11	0.42	0.11
18	68.05	0.41	2.57	0.19	0.56	0.16
19	56.82	0.57	2.2	0.17	0.39	0.33
20	48.97	0.66	1.95	0.26	0.45	0.25
21	41.81	0.78	1.82	0.2	0.5	0.38
22	36.86	1.02	1.56	0.38	0.48	0.29
23	28.13	1.04	1.48	0.21	0.37	0.52
24	23.5	0.8	1.21	0.18	0.35	0.36
25	18.58	0.85	1.17	0.19	0.33	0.43
26	15.39	1.04	0.83	0.17	0.36	0.64
27	12.71	0.62	0.81	0.13	0.48	0.51
28	11.5	0.82	0.78	0.12	0.31	0.36
29	8.05	0.62	0.87	0.11	0.23	0.64
30	10.45	0.74	0.97	0.09	0.46	0.57
31	5.01	0.65	0.62	0.11	0.24	0.68
32	5.64	0.78	0.61	0.18	0.18	0.78
33	4.53	0.63	0.54	0.17	0.26	0.82
34	4.63	0.63	0.77	0.05	0.3	0.7
Total	50.29	0.53	1.93	0.13	0.4	0.3

age	mar fam hh nch	mar fam hh chi	mar ot hh nch	mar ot hh chi	mar indep nch	mar indep chi
12	0.53	0	0.04	0	0.12	0
13	0.57	0.01	0.21	0.01	0.18	0.03
14	0.61	0.04	0.58	0.08	1.01	0.28
15	0.85	0.09	1.37	0.27	2.02	1.37
16	1.14	0.3	2.36	0.87	3.23	3.49
17	1.33	0.67	3.21	1.91	5.24	7.86
18	1.52	1.34	3.22	2.89	5.58	13.51
19	1.71	1.86	3.81	4.28	6.27	21.59

20	1.81	2.47	3.17	5	5.86	29.15
21	1.82	2.78	2.95	5.07	6.23	35.67
22	1.78	3.44	2.4	5.03	5.15	41.6
23	1.57	3.75	2.06	5.35	5.19	50.33
24	1.26	4.07	1.49	5.22	4.84	56.73
25	1.33	4.16	1.3	4.54	4.36	62.76
26	1	3.9	1.19	4.16	3.85	67.48
27	1.08	3.12	1.03	4.31	3.56	71.65
28	0.9	3.76	0.95	3.41	3.54	73.54
29	0.87	3.71	0.73	3.16	3.97	77.04
30	0.89	3.37	0.65	2.4	2.94	76.48
31	0.49	2.82	0.35	2.36	2.95	83.73
32	0.73	3.16	0.47	2.23	3	82.25
33	0.48	2.64	0.41	1.95	2.25	85.31
34	0.51	2.4	0.47	1.79	2.84	84.93
total	1.11	2.02	1.61	2.69	3.58	35.41

Abbreviations:

sing: single; mar: married; chi: with children; nch: without children

fam hh: family household; ot hh: household of other relatives; indep: independent residency

Table A.2 Descriptive Statistics of the Variables Used in the Models

Variables:	Males					Females				
	Obs	Mean	Stand. Dev.	Min	Max	Obs	Mean	Stand. Dev.	Min	Max
Dependent Individual:	169967	0.6665588	0.9139602	0	2	164860	0.8497695	0.9579069	0	2
Age	171132	20.95949	6.387038	12	34	166067	20.96405	6.381683	12	34
Years educ	168899	6.00222	3.109811	0	22	164095	5.434523	2.995619	0	22
Ever worked	170095	0.68634	0.4639813	0	1	163782	0.3128122	0.46364	0	1
Current work	170095	0.6748347	0.468438	0	1	163782	0.2628982	0.440209	0	1
Agric work	163233	0.3624145	0.4806991	0	1	160348	0.1046474	0.3060995	0	1
Wage earner	164632	0.4335002	0.4955595	0	1	160855	0.1083895	0.3108727	0	1
Family worker	171132	0.0571313	0.2320941	0	1	166067	0.0793294	0.270253	0	1
Work income	171144	130.086	197.0093	0	9180	166074	28.93549	105.3866	0	5466.667
Speaks Mayan	170267	0.5290573	0.4991564	0	1	165182	0.5167754	0.49972	0	1
Locality										
Size	171144	1.707527	1.137141	0	3	166074	1.729193	1.131076	0	3
Prop ag work	171144	0.5228739	0.2774149	0	1	166074	0.5198795	0.2762286	0	1
Prop wage work	171144	0.5260221	0.2364361	0	1	166074	0.5277151	0.2361627	0	1
Prop un-paid fam	171144	0.1125706	0.1495265	0	0.8095238	166074	0.1110919	0.1487626	0	0.8095238
Prop female work	171144	0.2400446	0.0982622	0	0.5555556	166074	0.240754	0.098073	0	0.5555556
Ag mean wage	166462	170.6729	58.28569	0	1566	161501	170.6598	57.84804	0	1566
Average total income	170962	201.6444	76.84989	0	840.3206	165885	202.6607	77.26126	0	840.3206
Prop landed	171144	0.436903	0.3037472	0	1	166074	0.433308	0.3026248	0	1
Prop irrigation	171144	0.0210535	0.0458033	0	0.8888889	166074	0.0211606	0.0453566	0	0.8888889
Prop indig head	171144	0.6832251	0.3495815	0	1	166074	0.6867953	0.3472005	0	1
Prop muni migrat	171144	0.0047407	0.0062663	0	0.0439024	166074	0.0047837	0.0063185	0	0.0439024
Male/fem literac	171089	0.9607905	0.0840973	0	3.428571	166013	0.9607612	0.0831468	0	3.428571
Sex ratio	171131	1.026124	0.150345	0	6	166065	1.013013	0.133116	0	6

Table A.3
Males

Multinomial logistic regression

Number of obs = 156032

Wald chi2(48) = 19177.16

Prob > chi2 = 0.0000

Log pseudo-likelihood = -69921.024

Pseudo R2 = 0.4420

(standard errors adjusted for clustering on idlocality)

Variables	Married in family home					Married in independent home										
	RRR	St. Err.	z	P>z	[95% Conf. Interval]	RRR	St. Err.	z	P>z	[95% Conf. Interval]	RRR	St. Err.	z	P>z	[95% Conf. Interval]	
Age	1.230	0.004	64.440	0.000	1.222	1.238	1.403	0.005	104.350	0.000	1.394	1.412				
Years educ	0.996	0.005	-0.710	0.475	0.986	1.007	0.938	0.003	-18.600	0.000	0.932	0.945				
Ever worked	5.992	0.700	15.320	0.000	4.766	7.534	12.608	1.883	16.970	0.000	9.409	16.894				
Current work	1.840	0.190	5.920	0.000	1.503	2.252	4.836	0.493	15.460	0.000	3.960	5.905				
Agric work	1.042	0.041	1.030	0.304	0.964	1.126	0.949	0.029	-1.700	0.090	0.893	1.008				
Wage earner	0.835	0.029	-5.160	0.000	0.780	0.894	0.843	0.024	-6.140	0.000	0.798	0.890				
Family worker	0.436	0.032	-11.290	0.000	0.377	0.503	0.135	0.019	-14.630	0.000	0.104	0.177				
Work income	1.001	0.000	8.330	0.000	1.001	1.001	1.001	0.000	9.480	0.000	1.001	1.001				
Speaks Mayan	0.992	0.043	-0.180	0.858	0.912	1.080	1.144	0.044	3.510	0.000	1.061	1.232				
Loc 500-999	1.209	0.075	3.060	0.002	1.071	1.364	1.014	0.048	0.290	0.772	0.924	1.112				
Loc 1000-2499	1.299	0.081	4.190	0.000	1.149	1.469	0.949	0.050	-1.000	0.317	0.856	1.052				
Loc 2500-15000	1.271	0.115	2.660	0.008	1.065	1.517	1.064	0.084	0.790	0.432	0.911	1.242				
Prop ag work	0.320	0.072	-5.050	0.000	0.205	0.497	1.289	0.268	1.220	0.222	0.858	1.938				
Prop wage work	0.799	0.158	-1.140	0.255	0.543	1.176	0.820	0.114	-1.430	0.154	0.625	1.077				
Prop un-paid fam	1.991	0.480	2.860	0.004	1.241	3.193	3.517	0.858	5.160	0.000	2.180	5.673				
Prop female work	0.435	0.152	-2.390	0.017	0.220	0.862	0.174	0.057	-5.340	0.000	0.091	0.330				
Ag mean wage	0.998	0.001	-2.490	0.013	0.997	1.000	1.001	0.000	2.790	0.005	1.000	1.002				
Average total income	0.997	0.001	-5.650	0.000	0.996	0.998	0.999	0.001	-0.950	0.343	0.998	1.001				
Prop landed	2.213	0.454	3.880	0.000	1.481	3.307	0.816	0.141	-1.180	0.240	0.582	1.145				
Prop irrigation	2.740	1.049	2.630	0.008	1.294	5.804	0.770	0.344	-0.590	0.558	0.320	1.849				
Prop indig head	1.244	0.124	2.190	0.028	1.023	1.513	0.652	0.047	-5.870	0.000	0.565	0.752				
Prop muni migrat	0.012	0.050	-1.050	0.293	0.000	45.534	0.000	0.001	-2.830	0.005	0.000	0.074				
Male/fem literac	0.372	0.102	-3.610	0.000	0.218	0.636	0.160	0.049	-5.940	0.000	0.088	0.293				
Sex ratio	0.341	0.056	-6.550	0.000	0.248	0.471	0.319	0.041	-8.960	0.000	0.248	0.409				

Table A.3 (cont)

Females

Multinomial logistic regression

Number of obs = 152735

Wald chi2(58) = 18744.24

Prob > chi2 = 0.0000

Log pseudo-likelihood = 79255.815

Pseudo R2 = 0.4009

(standard errors adjusted for clustering on idlocality)

Variables	Married in family home					Married in independent home									
	RRR	St. Err.	z	P>z	[95% Conf. Interval]	RRR	St. Err.	z	P>z	[95% Conf. Interval]	RRR	St. Err.	z	P>z	[95% Conf. Interval]
Age	1.291	0.004	80.360	0.000	1.283	1.299	1.475	0.005	118.350	0.000	1.466	1.485			
Years educ	0.939	0.005	-13.040	0.000	0.930	0.948	0.886	0.004	-30.430	0.000	0.879	0.893			
Ever worked	0.119	0.013	-19.190	0.000	0.095	0.148	0.179	0.020	-15.730	0.000	0.145	0.222			
Current work	2.387	0.153	13.590	0.000	2.106	2.706	2.479	0.142	15.820	0.000	2.215	2.774			
Agric work	1.667	0.127	6.680	0.000	1.435	1.936	0.892	0.059	-1.740	0.083	0.783	1.015			
Wage earner	0.534	0.046	-7.340	0.000	0.452	0.632	0.239	0.019	-17.930	0.000	0.205	0.280			
Family worker	3.054	0.326	10.480	0.000	2.479	3.764	4.382	0.398	16.290	0.000	3.668	5.235			
Work income	1.000	0.000	1.720	0.085	1.000	1.001	1.000	0.000	0.250	0.806	1.000	1.000			
Speaks Mayan	1.252	0.050	5.620	0.000	1.158	1.354	1.211	0.046	5.050	0.000	1.124	1.304			
Loc 500-999	1.166	0.073	2.430	0.015	1.030	1.319	0.996	0.050	-0.070	0.943	0.903	1.099			
Loc 1000-2499	1.209	0.071	3.220	0.001	1.077	1.357	0.854	0.049	-2.760	0.006	0.763	0.955			
Loc 2500-15000	1.116	0.094	1.300	0.192	0.946	1.315	0.854	0.064	-2.120	0.034	0.738	0.988			
Prop ag work	0.400	0.078	-4.700	0.000	0.273	0.586	1.053	0.182	0.300	0.764	0.751	1.478			
Prop wage work	0.991	0.152	-0.060	0.953	0.733	1.340	0.728	0.095	-2.430	0.015	0.564	0.941			
Prop un-paid fam	0.947	0.216	-0.240	0.811	0.605	1.482	1.128	0.272	0.500	0.618	0.703	1.810			
Prop female work	1.599	0.514	1.460	0.144	0.852	3.001	0.475	0.141	-2.500	0.012	0.265	0.851			
Ag mean wage	0.998	0.001	-2.300	0.021	0.997	1.000	1.001	0.000	4.230	0.000	1.001	1.002			
Average total income	0.998	0.000	-4.340	0.000	0.997	0.999	1.000	0.000	0.740	0.458	0.999	1.001			
Prop landed	1.960	0.341	3.870	0.000	1.395	2.756	0.926	0.148	-0.480	0.631	0.676	1.268			
Prop irrigation	2.421	0.969	2.210	0.027	1.105	5.303	0.515	0.193	-1.770	0.077	0.246	1.074			
Prop indig head	0.864	0.081	-1.550	0.120	0.719	1.039	0.418	0.031	-11.600	0.000	0.361	0.484			
Prop muni migrat	0.063	0.250	-0.690	0.488	0.000	158.849	0.001	0.004	-2.150	0.032	0.000	0.550			
Male/fem literac	0.632	0.150	-1.930	0.053	0.396	1.007	0.356	0.102	-3.620	0.000	0.203	0.622			
Sex ratio	2.041	0.301	4.840	0.000	1.529	2.725	2.134	0.283	5.720	0.000	1.646	2.767			

Figure 1
Transitions to Adult Life

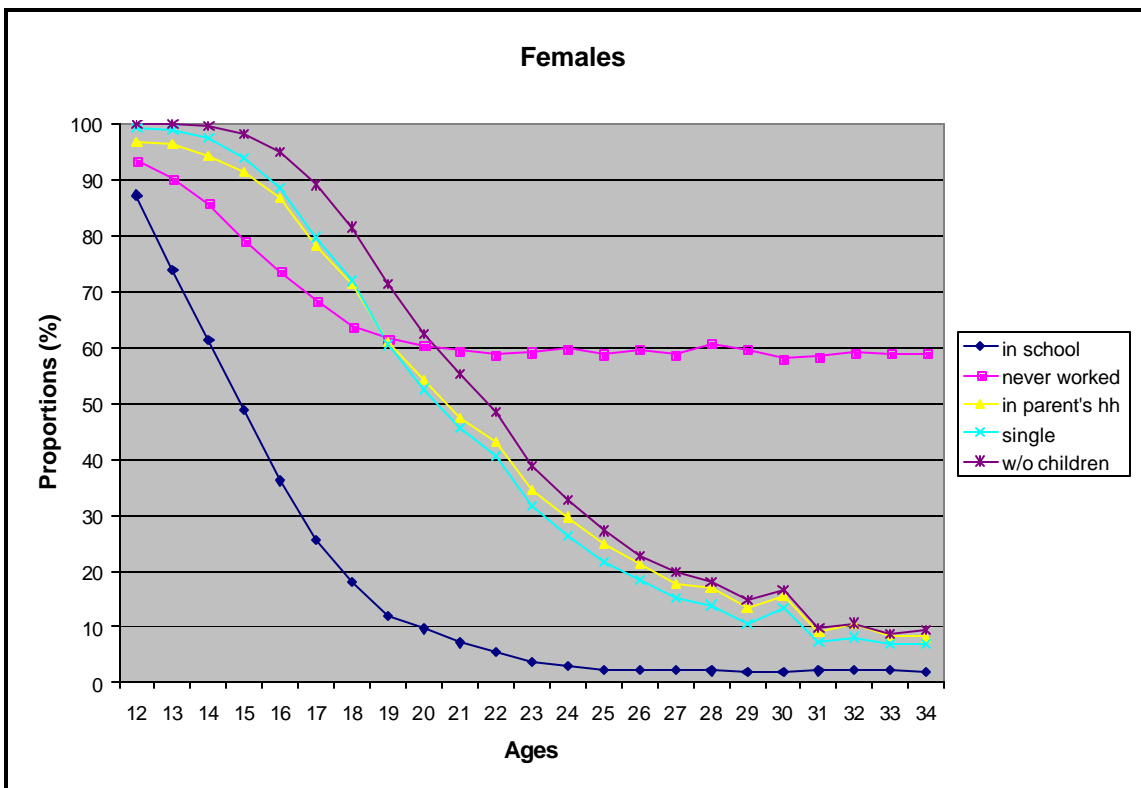
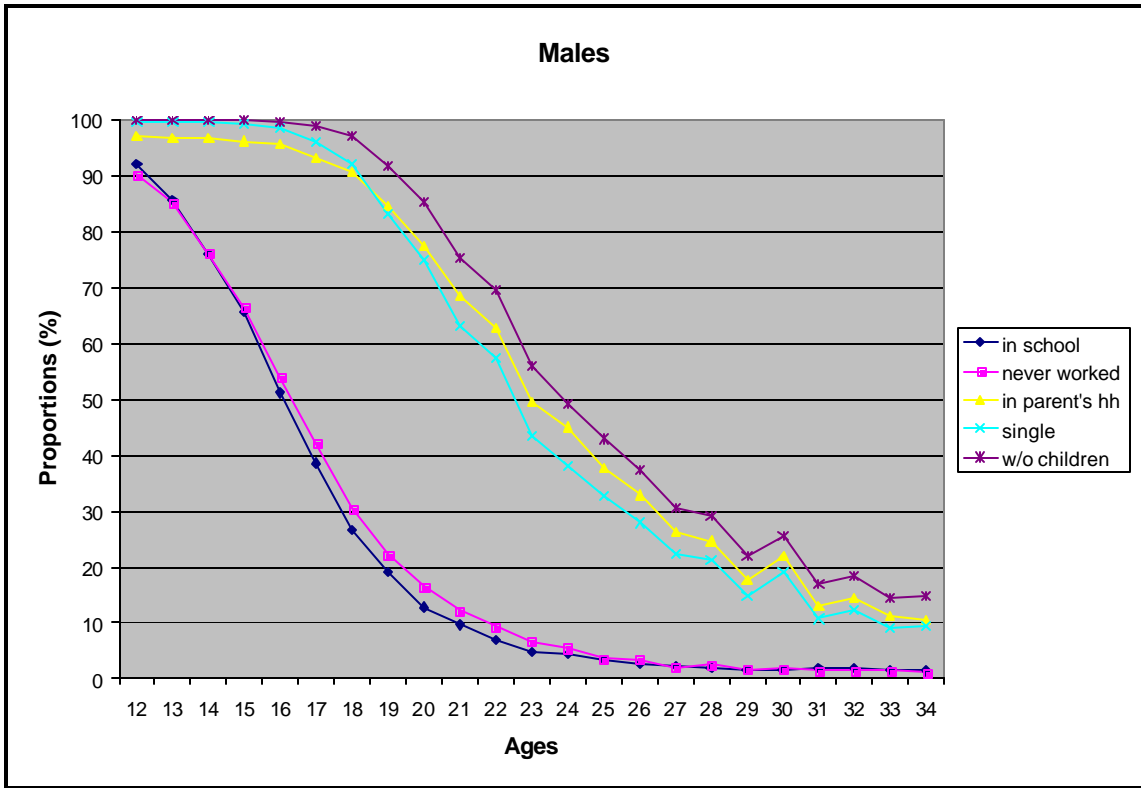
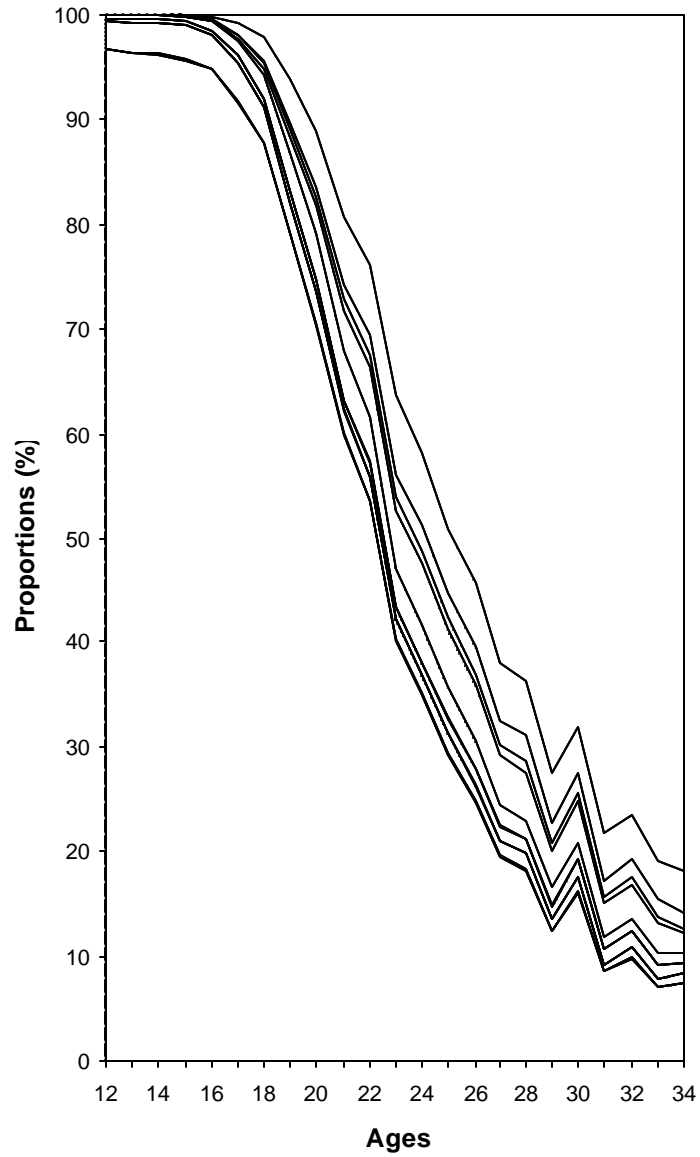


Figure 2
Paths to Adult Family Life

Males



Females

