Family Formation and Temporary Migration to the United States as Lifecourse Transitions among Mexican Men and Women

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Temporary migration to the United States can be an important path to acquire resources for many Mexicans. Life-course considerations, such as marriage, divorce, or childbearing, are critical for understanding an individual's decision to migrate. This paper uses data from the first wave of the Mexican Health and Aging Study (MHAS, 2001) to compare the timing of family formation (union formation and fertility) among older Mexicans with and without previous migration experience to the United States. It also looks at the effect that the timing of these life course transitions has on the timing of the first trip to the United States. The statistical approach includes descriptive tables and non-parametric survival curves, as well as latent class growth analysis to model these different pathways of family formation. Results confirm a delay in first union and fertility among migrant men and women when migration occurs before family formation. While men are able to make-up for this delay, a disruptive effect was found in the fertility of return migrant women.

INTRODUCTION

Migration and family formation are interrelated processes. Families transmit cultural values and norms related to migration, such as who is expected to migrate and under which circumstances, as well as the obligations towards the family while away. Families are likely to have mutually altruistic relationships and interests that strengthen the migrant's contract and make other family members feel more confident that the migrant will fulfill the arrangement of remitting and/or returning (Massey et al., 1993; Lucas & Stark, 1985). This is why the voluntary arrangement between migrant and household is more likely to develop in a family context.

From a life course perspective the changing household demands that mark different stages of the family life cycle, such as union formation or childbirth, will have considerable influence on the timing and frequency of migration. At the same time, migration is expected to have a great influence on family life (Hoem & Nedoluzhko, 2008; Hill & Milewski, 2007; Lindstrom & Giorguli, 2007). The life course perspective situates individual characteristics in time and space, acknowledging that our lives are historically bound. Another aspect recognized by the life course approach is that of linked lives. This is related to the importance of a context at the social level. If we situate lives in time and space they will necessarily have as a frame of reference the paths taken by other persons who are simultaneously traveling through time with them (Elder, 1996). These are known as the members of the same cohort (Ryder, 1965). The prevalent pathways constitute a social norm of what is "expected" for the members of a cohort. Recognizing individuals as social beings also acknowledges the multiple roles they play in their relationships with each other and through their choices in life (agency). Relevant to this study are the roles of becoming migrants, partners, and parents. These are all transitions that tend to concentrate during the main reproductive years and can, therefore, compete with, or complement one another.

The present study uses a life-course perspective that incorporates the interrelationship between migration, marriage, and fertility as life-course events. A life-course perspective is commonly used in family research because of its emphasis in age-based and socially meaningful transitions. Since transitions acquire meaning within a social context they must be looked at within families, communities, and historical events to fully understand

their meaning. Also, individual life changes never happen in isolation and usually bring about family changes. Migration is an important example of such a life change.

METHODS

The aim of this study is to compare the life-course transitions to first union formation, first childbirth, and first temporary migration to the U.S. among Mexican men and Women. This study will focus on three of the dimensions highlighted by G.H. Elder (1996) when looking at life course transitions: the prevalence, timing, and sequence of union formation, fertility, and temporary Mexico-U.S. migration.

Hypothesis *Union formation and fertility will happen later for migrant women compared to their non-migrant counterparts due to the disruptive effect of migration. Conversely, these same events will happen earlier for migrant men compared to non-migrant men, triggering migration as a way to gain access to necessary economic resources.*

Data

The present analysis will use the baseline survey of the Mexican Health and Aging Study (MHAS). The MHAS is a prospective panel study of health and aging conducted in Mexico in 2001 with follow-ups in 2003 & 2012. The baseline survey is a nationally representative sample of Mexicans born before 1951 (ages 50 and over in 2001) as well as their current spouse or partner regardless of their age. Note that only the selected individuals were included in the analytic sample.

The MHAS collected demographic information on the respondents as well as data on household and community characteristics. A common limitation to a life-course analysis is the lack of data containing life trajectories; this is especially true in the case of migration data that tends to be hard to obtain. The MHAS provides retrospective information on the time of marriage, the age of the children (which allows estimation of the age of the parent at the time of their birth), and the time of migration. This information was used to reconstruct the sequence of events across the life course and to look at long-term effects of U.S. migration among Mexican men and women. Despite all the advantages of the MHAS data, there are also well known limitations when using

retrospective data. There is selection bias in that only those who survived to be included in the survey are included. Recall bias can also be a concern when looking at retrospective information.

Outcome Variables

Ever in a Union and *Union timing* – the MHAS questionnaire has a section on Marital Status including questions on *current marital status, total number of unions, age at the time of the first union, duration of the first union,* and *reason why the union ended* (divorce/separation vs. widowhood). Note that no distinction is made between consensual and civil unions in the survey. The variables indicating ever being in a union as well as the timing of the first union were constructed with this information.

US migration experience and *US migration timing* – the MHAS has a specific section on Migration to the United States since one of the objectives of the study is looking at the long-term effects of migration to the United States on the well-being of migrants and their families. This section starts by asking if the respondent has *ever worked or lived in the United States,* the *timing* and *length of the first U.S. trip, total time in the U.S.,* and *timing of return from the last U.S. trip.* The survey does not provide information on the total number of trips, or on the timing of any other trips.

Children Ever Born and *Fertility timing*- The fertility section of the questionnaire include only two items: Number of *children ever born* (or fathered, in the case of men) and how many of those *children* are *still alive*. The fertility timing is not readily available in the questionnaire, but was coded using the roster of living children (including both co-resident and non co-resident children). Information about the children of the respondent includes their ages, which allows us to estimate the timing of each of their births in the life of the respondents. An important limitation on estimating the timing of fertility this way is that it suffers from some selection, in that we cannot estimate the date of birth of children who died before the date of interview This variable was bottom-coded at age 12, which is the youngest age for which the Mexican Census Office (INEGI) reports fertility.

Missing Values

None of the binary variables indicating the occurrence of the main outcome events (*U.S. migration, fertility, union formation*) had missing values. *Timing of first* union and *timing*

of first childbirth were missing for less than 5% of the respondents each. An analysis of the missing data shows that those individuals missing information were more likely to be men, older, less educated, and living in rural areas. The variable with the greatest proportion of missing values was the timing of U.S. migration. Ninety-seven respondents, representing 10.9% of those with any U.S. migration experience, were missing the timing of their first trip to the United States. These values, however, were missing at random (results of these models are available upon request).

Statistical Analysis

The statistical approach employs descriptive tabulations including non-parametric survival curves to compare the timing and sequence of the life-course events by gender and migration status.

The second part of the analysis will focus on the U.S. migrant sample, using the timing variables to identify the sequence in which first migration, union formation, and fertility take place among men and women. Latent growth analysis will be used to model the different pathways of migration and family formation.

RESULTS

Sample Characteristics

Table 1 provides a summary of the distribution of the main variables included in the study stratified by gender and U.S. migration experience. Among the Mexican population aged 50 and over, and residing in Mexico in 2001, 13% of the men and 3% of the women have ever lived or worked in the United States. Although men are more likely to migrate and to do it earlier than women (mean age of first trip 27 years versus 32 for women), migrant women tend to stay longer on average (7.9 years versus 5.1 years for men). We can see that migrant men and women tend to be slightly older; possibly due to temporary working programs between Mexico and the United States, like the Bracero Program (1942-1964), that benefited the older generations. The level of formal education is very low among these cohorts. The average is around four years, two years less than the six years required to complete elementary education in Mexico. It is interesting to point out,

though, that migrant men have less education while migrant women have more education than their non-migrant counterparts.

As for the family formation variables it is possible to see that the timing of first union formation is very similar between men, regardless of their migration experience (mean age 22.9 for non-migrants versus 23.2 for non-migrants.) Women enter unions slightly younger than men and women who have ever been to the U.S. show a higher mean age of first union formation (20.3 years) than non-migrant women (18.7 years). The timing of parenthood is very similar between men, regardless of the migration status, with a mean age of first birth of 26.6 for non-migrants, and 26.9 for migrants. As with the timing of union, age at first birth is slightly lower among migrant women (21.8) than those who never spent time in the United States (22.4). While childbearing is almost universal among the sample, a slightly lower proportion of migrant women ever had children (87. 2% versus about 93% for all other groups). Migrant women also seem to have fewer children (4.9 children ever born) in contrast to migrant men (6.3 children ever born) and appear to have fewer than their non-migrant counterparts (5.9 children ever born). The largest difference between migrants and non-migrants can be found in the prevalence and timing of union dissolution among temporary migrant women to the U.S. They not only have a much higher prevalence of union dissolution (35.2% of those ever in union versus 22.4% of non-migrant women, and about 20% of both migrant and non-migrant men), but also a higher age of union dissolution than any other group (43.7 years versus 36.3 years for non-migrant women, 38.2 years for migrant men, and 36.8 years for non-migrant men).

Descriptive analysis of Life course events

Table 2 presents the cumulative proportion of life course events: first union, first child, and first trip to the United States from ages 15 to 45. Figures 2a,b, and c, show these transitions as Kaplan-Meier survival curves, which allow us to see the timing of these transitions more clearly and to compare them across gender and migration status. Overall, women experience first union and childbearing earlier than men, regardless of their migration experience. Figure 2a shows that Migrant women form unions at a slightly later age than non-migrant women, but seem to catch up around age 30 and end up with a

higher prevalence of union formation due to their higher rates of union formation from ages 35 and over. A log-rank test confirms that the survival curves are significantly different by migration status, p-value = 0.011. As for fertility, migrant women seem to start earlier than non-migrant ones but then slow down and end up with higher levels of childlessness and lower fertility (Figure 2b). These differences are, however, non-significant (p-value = 0. 222). Men's transitions to both first union and parenthood are very similar regardless of their migration experience. A log-rank test of the survival curves confirms that there are no significant differences; p-value = 0.446 for first union, and 0.1081 for first child.

Figure 2c compares the survival curves for first U.S. trip among migrant men and women. The timing of first migration follows a pattern consistent with labor migration among men, concentrating mainly in their twenties and thirties and then slowing down around age forty. For women the decrease in the survival curve is more gradual and starts much earlier than for men (childhood migration) until around age twenty, when it crosses-over with the men's survival curve. After age twenty women's migration occurs at older ages than men's and at a slower rate.

Patterns of Family Formation among temporary U.S. migrants

Looking only at the migrant men and women it is easier to see the relationship between the three events of interest in this paper. Figure 3 shows the superimposed survival curves for first union formation, first childbirth, and first trip to the U.S., by gender. The traditional family formation pattern where union is followed by fertility is clearly prevalent among male and female migrants. For men, the survival curve for U.S. migration follows the shape of the survival curves for fertility and union but after the median time of survival seems to occur at later ages. For women, migration seems to occur mostly after family formation as suggested by the crossover around the 75^{th} survival percentile.

Table 3 incorporates more explicitly the sequencing of these events, showing all the possible variations in trajectories by which these three events take place among migrant men and women, and groups them into three categories according to whether the first US trip occurred before, after, or between family formation events. The first category in the

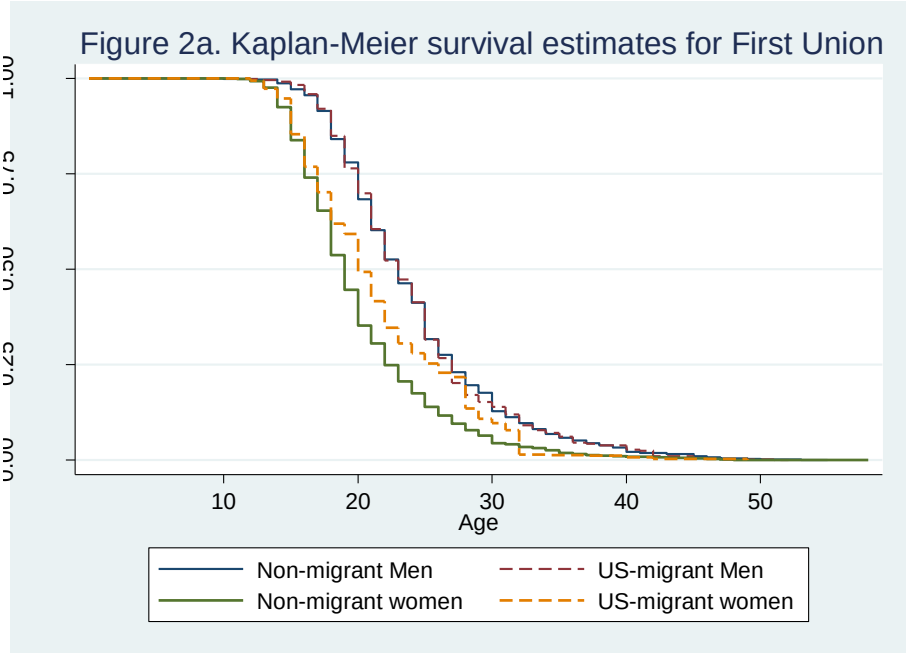
table, in which union and/or fertility happens before or at the same time than first migration, is labeled as “Family formation first”. This is the most common pattern for both genders, although more so for migrant women than for men, with 45% of men and 61% of women forming a union, having a child, or both before making their first trip to the United States. It is also the sequence of events suggested by looking at the survival curves in Figure 3 and at the mean age of occurrence of these events in Table 1. The second most common sequence of events is when U.S. migration occurs before union and/or fertility, “Migration first”. This pattern is more common for men (42%) than for women (31%) and the majority follow a very traditional path, migrating to the US, forming a union, and then becoming a parent. In the last category, migration occurs in between union and fertility, regardless of which one of the family formation events occurs first. This is more common among men than among women (13% versus 8%) and is dominated by cases where union takes place before migration, with first birth occurring later. Overall, 60% of the sample (69% of men and 58% of women) began forming a family before migrating to the US.

Table 4 expands on Table 3 by providing the average timing of the life course events based on the sequence they follow. As expected, migrant men and women that migrate after forming a union and start having children do it, on average, in their mid to late thirties. They also have lower ages of first union (22.3 for men and 20.2 for women) and childbearing (24.2 for men and 21.4 for women) than the rest of male and female migrants. The opposite occurs among men and women who migrate during their teen years, before starting a family. These migrants have the highest mean ages of first union formation (27.3 for men and 24.8 for women), but the lowest migration ages (16.7 for women and 19.9). Much lower than the mean age for the overall migrant men (27) and women (32). The highest mean age of first childbearing is found among those migrant men and women that migrate in between union and fertility events, usually after forming a union and before having children. The men and women in this group have their first child, on average, at 31.4 and 27.4 years old compared to 26.9 and 21.8 for the overall male and female migrants.

TABLES AND FIGURES for the descriptive part of the analysis:

Table 1. Descriptive Statistics by Gender and Migration Experience. Mexican Men and Women 50 years and older residing in Mexico in 2001.				
Variables	**Non-migrant Men n=3,284**	**US-migrant Men n=580**	**Non-migrant Women n=4,656**	**US-migrant Women n=158**
Ever in a union (%)	95.0	95.4	92.6	94.1
1st Union timing, Mean Age (SD)	22.9 (8.2)	23.2 (7.6)	18.7 (7.6)	20.3 (7.7)
Q1	19	19	16	16
Median	23	23	19	20
Q3	27	27	22	25
Ever separated/divorced (%) Among those ever in a union	20.3	19.6	22.4	35.2
Mean age of separation (SD)	36.8 (12.9)	38.2 (15.6)	36.3 (13.3)	43.7 (12.7)
Q1	27	25	25	32
Median	34	34	35	40
Q3	45	53	45	58
Ever had children (%)	92.6	93.5	92.6	87.2
Children Ever Born, Mean (SD)	5.7 (3.7)	6.3 (3.9)	5.9 (3.7)	4.9 (3.6)
Mean age of first birth (SD)	26.6 (6.4)	26.9 (6.9)	22.4 (5.5)	21.8 (5.7)
Q1	22	22	18	17
Median	26	26	21	21
Q3	30	30	25	24
Ever in the U.S. (%)		13.2		3.2
Mean age of first U.S. trip (SD)		27.0 (10.4)		32.1 (16.3)
Q1		20		22
Median		25		34
Q3		32		41
Total time in the U.S., Mean (SD)		5.1 (8.7)		7.9 (10.4)
Q1		1		1
Median		2		4
Q3		5		9
Mean age (SD)	62.4 (10.0)	64.2 (10.1)	63.6 (10.6)	64.4 (10.0)
Years of education, mean (SD)	4.4 (4.6)	3.7 (4.2)	3.6 (3.8)	6.0 (5.7)
Education (%) No education	27.3	29.3	34.5	21.2
Some elementary	51.0	58.8	48.9	62.4
More than elementary	21.7	11.9	16.6	37.6
Community Variables (%)				
More urban area	42.1	36.1	49.6	56.9
High-migration state	14.2	42.6	19.2	24.7
Source: MHAS 2001, weighted estimates				

Table 2. Cumulative Prevalence of Life Course Transitions (%) by gender and U.S. migration status										
Age	**First Union**				**First Child**				**First U.S. trip**	
	Men		Women		Men		Women		Men	Women
	Non-migrant	US-migrant	Non-migrant	US-migrant	Non-migrant	US-migrant	Non-migrant	US-migrant	US-migrant	US-migrant
15	2.3	1.4	12.5	11.1	1.1	1.6	5.1	9.0	0.5	0.3
20	29.0	29.1	58.1	44.2	13.2	17.9	38.5	38.1	3.5	0.6
25	65.0	65.7	78.6	69.3	46.0	46.6	69.3	69.0	6.6	1.0
30	83.2	83.2	88.0	83.9	71.5	71.8	84.0	77.8	8.6	1.3
35	90.2	90.5	90.5	92.4	84.6	83.4	89.5	84.5	10.1	1.6
40	93.6	94.0	91.4	93.0	89.6	89.6	91.5	85.7	11.0	2.2
45	94.5	95.6	91.8	93.4	92.2	92.5	91.9	86.2	11.2	2.3
Total	**95.0**	**95.4**	**92.6**	**94.1**	**92.6**	**93.5**	**92.6**	**87.2**	**13.2**	**3.2**
MHAS, 2001. Weighted statistics										



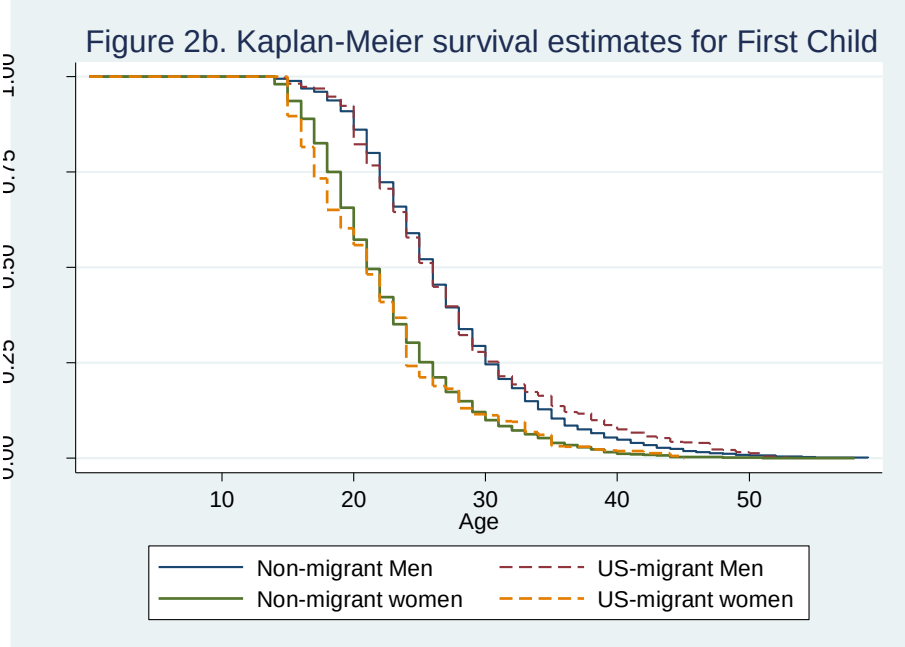


Figure 2b. Kaplan-Meier survival estimates for First Child
1.00
0.75
0.50
0.25
0.00
10
20
30
40
50
Age
Non-migrant Men
US-migrant Men
Non-migrant women
US-migrant women

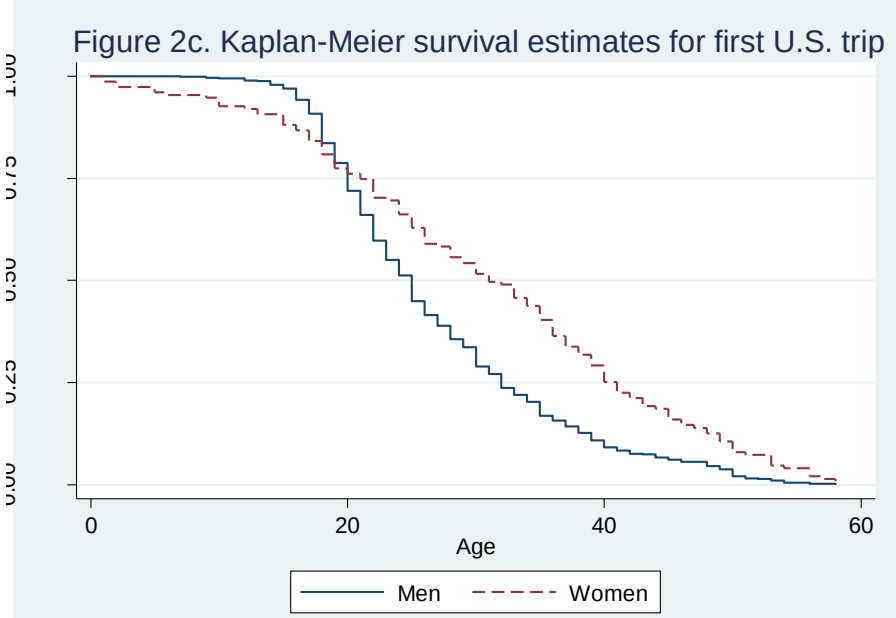


Figure 2c. Kaplan-Meier survival estimates for first U.S. trip
1.00
0.75
0.50
0.25
0.00
0
20
40
60
Age
Men
Women

Figure 3. Survival curves for first life course transitions

among temporary Mexican migrants to the U.S.

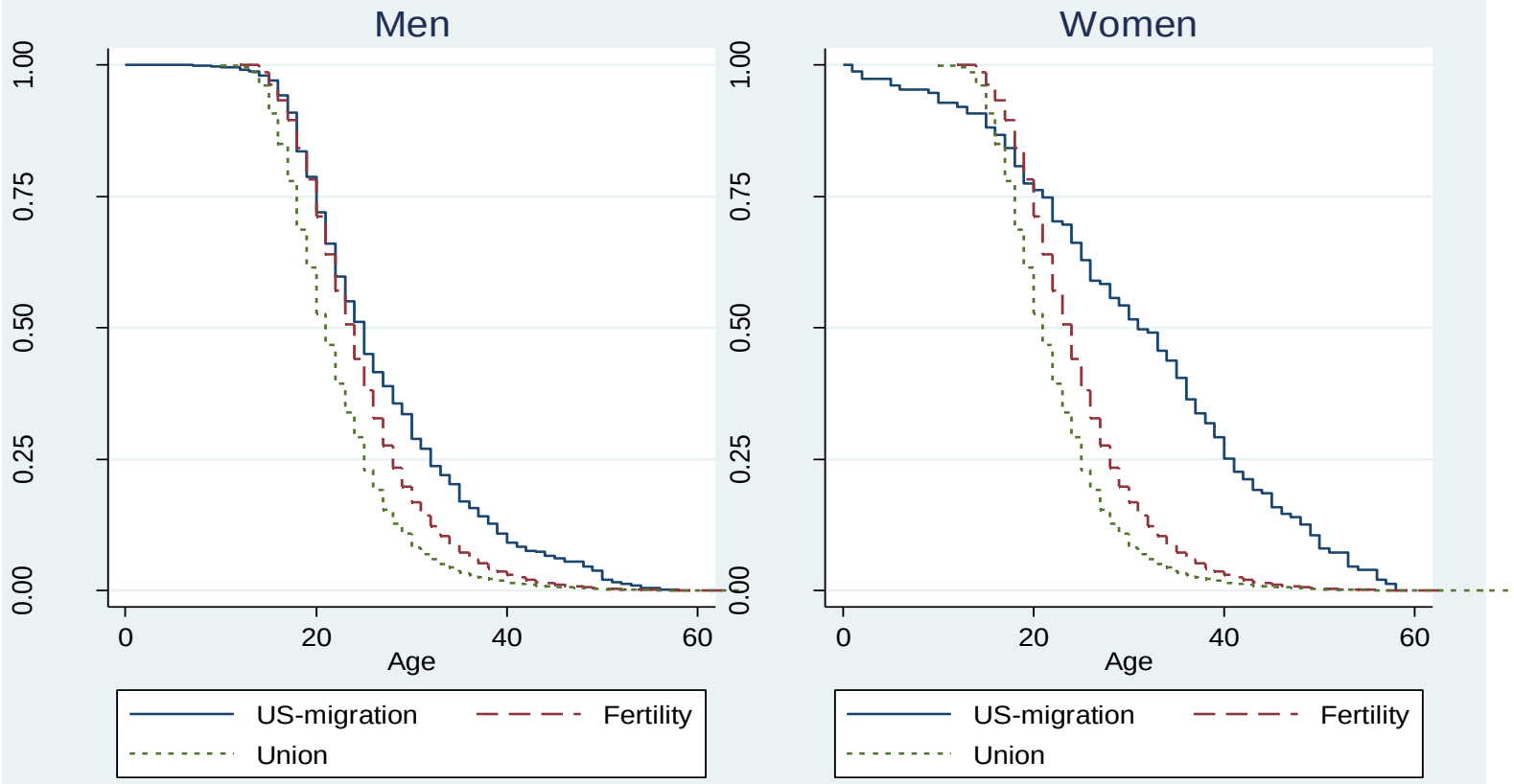


Table 3. Prevalence and sequence of life course transitions Among temporary Mexican migrants to the US			
Events	**Men N (%)**	**Women N (%)**	**Total N (%)**
Family formation first	271 (45%)	97 (61%)	368 (48%)
Union-US	3	2	5
Fertility-US	1	3	4
Union-Fertility-US	155	57	212
Fertility-Union-US	45	11	56
Union=Fertility-US	51	21	72
Union=Fertility=US	3	1	4
Fertility-Union=US	4	1	5
Union-Fertility=US	9	1	10
Migration first	255 (42%)	50 (31%)	305 (40%)
US only	16	9	25
US-Union	10	4	14
US-Fertility	1	3	4
US-Union-Fertility	152	24	176
US-Fertility-Union	30	3	33
US-Union=Fertility	46	7	53
Migration in between	77 (13%)	12 (8%)	89 (12%)
Union-US-Fertility	53	9	62
Fertility-US-Union	6	1	7
US=Union-Fertility	13	2	15
Fertility=US-Union	5	0	5
TOTAL	603 (100%)	159 (100%)	762 (100%)

Table 4. Mean Age of Life Course Transitions by sequence of events among temporary Mexican migrants to the United States, MHAS 2001						
	MEN			**WOMEN**		
Patterns	**1st Union Mean (SD)**	**1st Birth Mean (SD)**	**1st US-trip Mean (SD)**	**1st Union Mean (SD)**	**1st Child Mean (SD)**	**1st US-trip Mean (SD)**
Family Formation first	22.3 (4.3)	24.2 (5.1)	34.2 (9.6)	20.2 (4.7)	21.4 (4.7)	39.0 (10.8)
US-migration first	27.3 (6.1)	29.9 (7.1)	19.9 (5.4)	24.8 (8.5)	27.1 (7.3)	16.7 (12.1)
Migration in between	22.1 (5.3)	31.4 (8.9)	24.9 (5.2)	21.3 (5.6)	27.4 (7.8)	22.6 (3.6)
All migrants	23.2 (7.6)	26.9 (6.9)	27.0 (10.4)	20.3 (7.7)	21.8 (5.7)	32.1 (16.3)