Understanding Education's influence on Migration of Women in South Asia by Disentangling Premarital and Marital Migration: A Case Study of Nepal

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Abstract

This study addresses the contemporaneous nature of migration and marriage in the South Asian context. I use two samples and series of analyses to make a distinction within marital status based on the proximity to the actual month of marriage and also define premarital migration using a rich and complex Chitwan Valley Family Study in Nepal. Comparative analysis of the results from the *full* and *never- married monthly registry* suggest that the bigger effect of educational attainment is on women's migration for marriage. This result implies that the criteria for a suitable wife might be changing among the younger generation in Nepal such that women with at least a secondary level education are considered better prospects for marriage as in other developing countries. At the same time, the non-existent effect of education on premarital migration of women might have social implications and requires further exploration.

Significance and Background of the Study:

Sociological and demographic literature has considered gender to be an important factor that influences the process of migration in young adult's lives. In South Asian context where marriage is a major driver of migration among young women of marriageable ages, attention to gender differences is much more relevant. The distinct differences between premarital migration experience and marital migration particularly for women has to be addressed to understand the effect of determinants of migration.

Among various determinants influencing migration, the effect of education on young men's and women's migration has been studied in various cultural contexts. This literature has already established that education selectivity exists and that propensity to migrate is generally higher for the more educated individuals even when controlling for age selectivity of educated migrants However, in a cultural context like South Asia where women migrate upon marriage, it is difficult to distinguish whether education increased women's labor-related migration or just marriage. Two studies done in Nepal by Williams (2009) and Subedi (n.d) have shown that highly educated women are much more likely to migrate than their similarly-educated male counterparts and less-educated women. However, these two studies could not make distinctions as to whether women were migrating for marriage or labor. Therefore, it could not be ascertained whether education increased women's marital value or job market value.

Therefore, it seems necessary to first employ a clear definition of migration in the South Asian context to study gendered migration process. To disentangle marriage-related migration from other migratory events that occur before marriage, studies usually employ a simplistic method of addressing this issue by including gender and broader categories of marital status (unmarried, married, divorced/widowed) as control variables (Williams 2009, Bohra and Massey 2009, Gubhaju and De Jong 2009). To improve upon this specification of women's migration, I try two strategies. First, I employ a nuanced definition of migration to make distinctions between premarital migration and the marriage-related local mobility of young women; second, I introduce a complex conceptualization of marital status that considers the recency of marriage for women when considering their marital status. In other words, instead of combining women who had married at a certain point in time, and women who had been married for quite some time into the same category of marital status, I make a distinction between the two. Naturally, women who had just married would be more likely to migrate as they relocate to their husband's home or village upon marriage. To make these distinctions, I capitalize on the availability of detailed monthly data on the timing of marriage and migration from the CVFS data. I carry out analyses that specify the distribution of migration frequency and reasons behind migration at different time periods around the month of marriage. The results also allow me to make distinction between two types of migration for this study

The first type of migration combines both local mobility (including those related to marriage for women) and labor- and education-related moves among the *full* sample. The second types of migration is the premarital migration of young adults undertaken mostly for education or work among the *never-married* sample comprised of young men aged 15 to 35 and women aged 15 to 30 in 1996.

If marriage increases women's marital value and thus increases their marital migration, I will expect to see that education increases women's general migration around the time of their marriage. On the other hand, if education is indeed increasing women's job market value, education should increase never-married women's premarital migration, which is defined to be primarily education- or work-related migration. Likewise, education should increase men's likelihood of both general and premarital

migration because men in Nepal are compensated better in the job market for their education achievement than women.

Method and Analysis

Data

I utilize rich and complex data from Chitwan Valley [Nepal] Family study that employs ethnographic and survey research methods to gather yearly life histories and prospective monthly registry data that cover a period of rapid social change in western Chitwan, Nepal between 1940 and 2008. I combine the monthly registry dataset with corresponding cross-sectional datasets compiled at the individual level in 1996 and 2008, and household level in 1996, 2001, and 2006 to create two types of analytical samples – (a) *full monthly registry* sample (N=4457), and (b) *never-married monthly registry* sample (N=1041), to study determinants of entry into first migration since 1996 for the respondents.

The *full monthly registry* sample includes the original 4,457[1] respondents of ages 15-69 representative of the population in the study area in 1996. This sample has full information on socio-demographic variables, childhood context, migration, marital, employment, and education history from the individual and life history calendar in 1996. The monthly registry data provides monthly age, marital status, and migration behavior of this sample from February 1997 until Jan 2008. This sample follows 94 percent of the original respondents until 2008. In addition, from 1997 until 2000, for 2,090 respondents, data was also collected on the reasons behind the move if they moved out of the study area. However, this data was not collected after the 36th month.

The *never-married monthly registry* sample is a subset of the full sample and includes 1041[2] respondents. This sample is restricted to young women ages 15-30 (N=484) and young men ages 15-35 (N=557) who had never married in their lifetime as of 1996. The upper age restriction on this *never-married monthly registry* sample was placed because the young men and women who are not yet married by ages 30 and 35 are probably a selective group of people in the area and their migration and marital behavior is not representative of the young adults. This data also has a very small proportion of respondents who are lost-to-follow up. Only 2.6 percent of individuals are lost to the follow up – out of which 1.6 percent died in the time period and 1.0 percent was not located.

Analyses:

The contemporaneous nature of marriage and migration among females in the study area[3] raises problems when modeling the probability of migration. Therefore, I carry out two steps of analysis. The first step includes a set of descriptive analyses that provides information on the timing between marriage and migration. The results from these analyses will inform the creation of premarital migration variable for the *premarital migration* analysis and the creation of marital status in the *general migration* analysis.

In the second step, I carry out two different sets of analyses, one using the *full monthly registry* sample to find determinants of general migration, and another set using the *never-married monthly registry* to find determinants of premarital migratio. I have labeled these two analyses as *general migration analysis* and *premarital migrationanalysis* for reference purposes in this paper. Within each set of

[1] Although the original sample was 4,483, it included males older than 69 upto age 80. The age is restricted to age 69 to capture individuals who are still likely to migrate.

[2] The total number of never-married individuals in 1996 is 1,057 but once the age restriction of ages 15-30 for females and 15-35 for males is applied, the number decreases to 1,041.

[3] Since the area is patrilocal, women move to their husband's house and village upon marriage.

analyses, I use a series of **discrete-time event history logit models** to estimate the probability of migration event occurring in a given person-month after 1996. For both analyses, separate models were carried out on the male and female sample to examine the differential effect of education on men's and women's migration.

Defining Migration and Marital status

I use the results from first set of analysis to create these two variables. To do this, I calculate and graph the frequency of migration that occurred at different time periods around the month of marriage for males and females for those individuals who got married between 1996 and 2008 (see Figure 1 and Figure 2). In the second analysis, I supplement this information with descriptive results on the reasons behind migration as seen in Figure 3. In combination, these two analyses provide a complete picture on how frequently migration occurs before and after marriage and for what reasons do these migrations occur.

The results from figures 1 and 2 show that females and males differ in their migration pattern with pronounced difference seen during the month of marriage, and six months before and after marriage. The distribution shows that the number of migration that occurs in the month of marriage and within six months after marriage is higher for females than for males. More specifically, migration is higher in the two months before and after marriage for both males and females if examined within the two year window around marriage. If examined around 5 years before and after marriage, particularly notable is the lowest level of migration experienced by both males and females in the year before marriage and high level of migration experienced by both males and females after a year of marriage. In addition, migration frequency in the two years before marriage is higher than after marriage for both males and females, suggesting that migration is higher for unmarried individuals than individuals who have been married for a year.

The result from the second analysis on reasons behind migration show that the main reason for migration for females in the month of marriage, two months before marriage, and six months after marriage seem to be marriage-related. For men, the major reason for migration in the same time period was work related with the exception of two months before marriage when they seem to be migrating back home, probably for marriage. In addition, in the two months after marriage, men migrate because of changes in living arrangement, consistent with establishment of separate household. In the years before marriage (except the immediate year before marriage), migration was undertaken mostly for studying by females and mostly for work by males.

Results from these two analyses provide substantial information to help (a) define migration (b) define nuanced monthly marital status for the general migration analyses using *full monthly registry* analysis.

(a) *Definition of general migration:* For both *general and premarital migration* analyses, I examine the first migratory event that occurred since February 1997. For the first analysis examining general migration in the study area, that combines both local mobility (including those related to marriage for women), an individual is considered to have started migration in a month if he/she moved away from the original household in the study area for at least three months or more.

(b)Definition of premarital migration: For the second analysis focusing on premarital migration of the *never-married monthly registry* sample, respondents' first migratory event that lasted for at least three months and occurred before their marriage is defined as premarital migration. I use the three month time-frame based on the first step of analysis that showed that migration undertaken the month of, two months before and until six months after marriage by females are probably marriage-related. Even for

men, migration undertaken two months before marriage does not seem to be labor-related. Therefore, I consider a migration event that occurred at least two months before the month of marriage as a valid premarital migration event in the analysis of never-married sample.

(b) *Specification of monthly marital status*: These results also show that marriage-related migration could start a year before and last up to a year after marriage although the proportion is much higher within six months after marriage. Therefore, I use four categories of marital status for each person-month in my final analysis.

(a) *Unmarried*: Those who never married between 1996 and 2008 will have this value for all person months. However, for those who got married in-between, this category applies to the time period up to a year before marriage.
(b) *To be married within a year or have been married for a year*: This monthly status will apply to 12 months preceding and following marriage, including the month of marriage and is relevant to only those respondents who got married in-between.
(c) *Married for more than a year*: Those respondents who were married in 1996 will have this value for all person months until they get divorced, separated, or widowed. For those respondents who got married in between, this value applies only if they have been married for more than a year.
(d) D*ivorced/widowed*: Those who were already divorced/widowed in 1996 will have this value through all months. Among those individuals who were already married in 1996 or got married afterwards, this value applies to the months after which they get divorced or widowed.

Results and Discussion:
In this extended abstract, I compare the effect of education on general migration and premarital migration of women. I also show how nuanced conceptualization of marital status allows for interpreting the different effect of education on marital vs. non-marital migration.

Education increases women's likelihood of migration (not shown). For instance, women who have primary- and secondary-level education have 25 percent ($e^{0.23}$=1.25) and 27 percent ($e^{0.24}$=1.27) higher odds of migrating than those with no formal education. Similarly, women with greater than higher secondary–level education were two times as likely ($e^{0.71}$=2.03) to migrate as those without formal education (Table 5.2, model II). This effect had remained even after household assets and other control variables were introduced into the model thus suggesting an independent effect of education on women's migration. Surprisingly, education did not have a significant effect on men's migration propensity. Additional logistic regression models show that the effect of education decreased in significance and magnitude once men's employment status or men's job experience were introduced into the model I. This supplementary result suggests that education's effect on men's likelihood of migration is probably related to their job prospects.

These results show that education increases women's migration propensity but not men's. However, this result alone does not ascertain whether education increased women's marital value or job market value. Since women's migration also includes marital mobility in this analysis, I further examine whether the predicted effect of education on migration is influenced by marital status of the respondents. In Figure 4, I compare the migration probability of young men and women who will be married within a year or have been married in the last year to those who have never marriage[4]. I show this comparison for hypothetical

[4] I also tried running a model with interaction term between educational categories and marital status. However, because of the smaller number of cases within higher secondary level education category and "to be married within a year or married for a year" and divorced/widowed categories, the interaction effect did not provide clear results. The predicated probability on the other hand, allowed me to specify the effect on particular age group and provided interpretable result.

group of respondents between the ages of 20-24 without migration history by their educational level while keeping other covariates at their means. I chose the 20-24 age group to focus on respondents within marriageable age whose migration probability would not be affected by their migration history. As seen in the figure, the effect of education in and around the time of marriage is higher than when both males and females are unmarried, or have been married for at least a year. Since we know that migration probability of women around marriage is high, this result is expected. The more notable effect is that migration probability increases as education level increases for women around the time of marriage. In contrast, the probability of migration does not increase as sharply for unmarried women, thus suggesting that educational attainment might be increasing women's marriageability. On the other hand, the effect of education does not differ by marital status for men.

Unlike the results from the general migration analyses, education had a significant effect on men's premarital migration but not women's premarital migration (not shown). As seen in model II, each additional year of education increased the odds of men's migration by six percent ($e^{0.06}$=1.06) . For women, the effect was in similar direction but not significant. This trend is seen clearly in Figure 5, which presents the predicted probability of migration by education while keeping other covariates at their mean. I had expected young women's premarital migration to increase with their education level if education provided them with the skills and knowledge to benefit in the destination job market. Although likelihood of premarital migration increases slightly after having 10 years of education for women, this increase is not as marked. In contrast, it seems young educated men's likelihood migrating increases sharply with each year of increase in educational level. This suggests that young men perhaps benefit from education in the destination labor markets as expected because they are compensated better for their education achievement in the job market.

Comparative analysis of the results from the *full monthly registry* sample and *never married registry* sample clearly indicates that education does not significantly increase women's premarital migration for human capital acquisition. In addition, the bigger effect of educational attainment is on women's migration for marriage.

Figure 1. Distribution of Total Migration in years before and after Marriage for Males and Females , *never-married monthly registry* sample

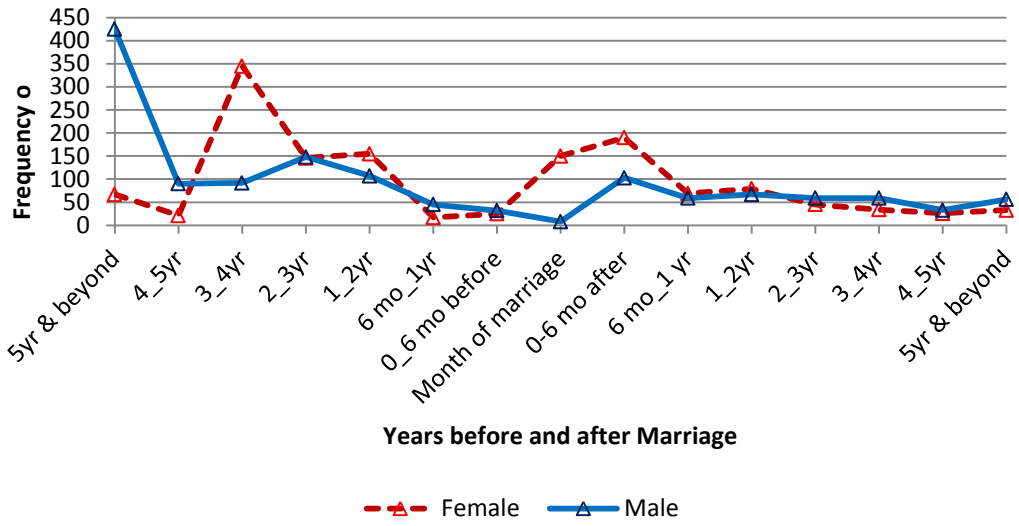

Figure 2. Distribution of Total Monthly Migration in the year before and after Marriage, *never-married monthly registry*

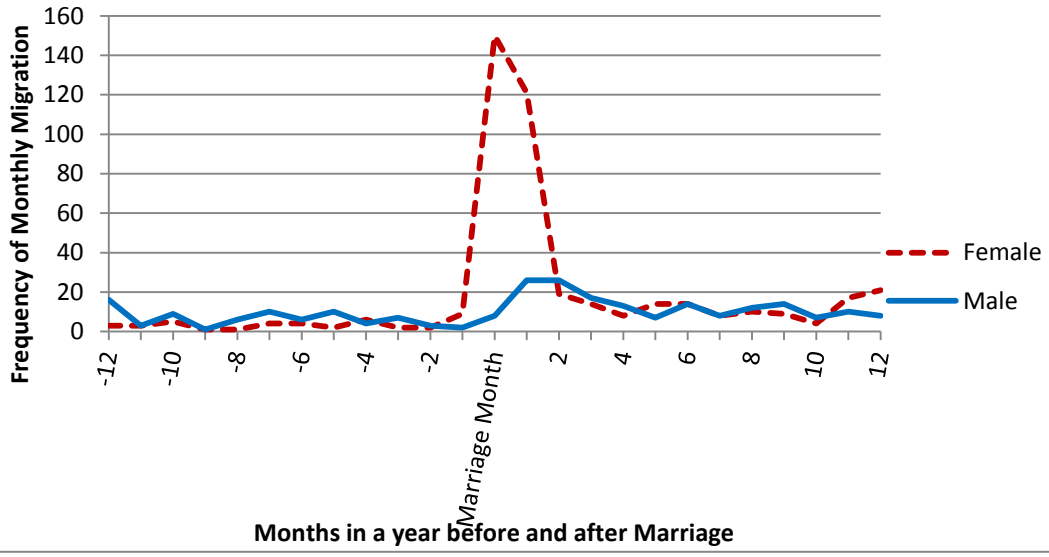

Figure 3. Reasons for Migrating for Males and Females who Migrated before and after Marriage, *never-married monthly registry* sample with data collected upto 36 months

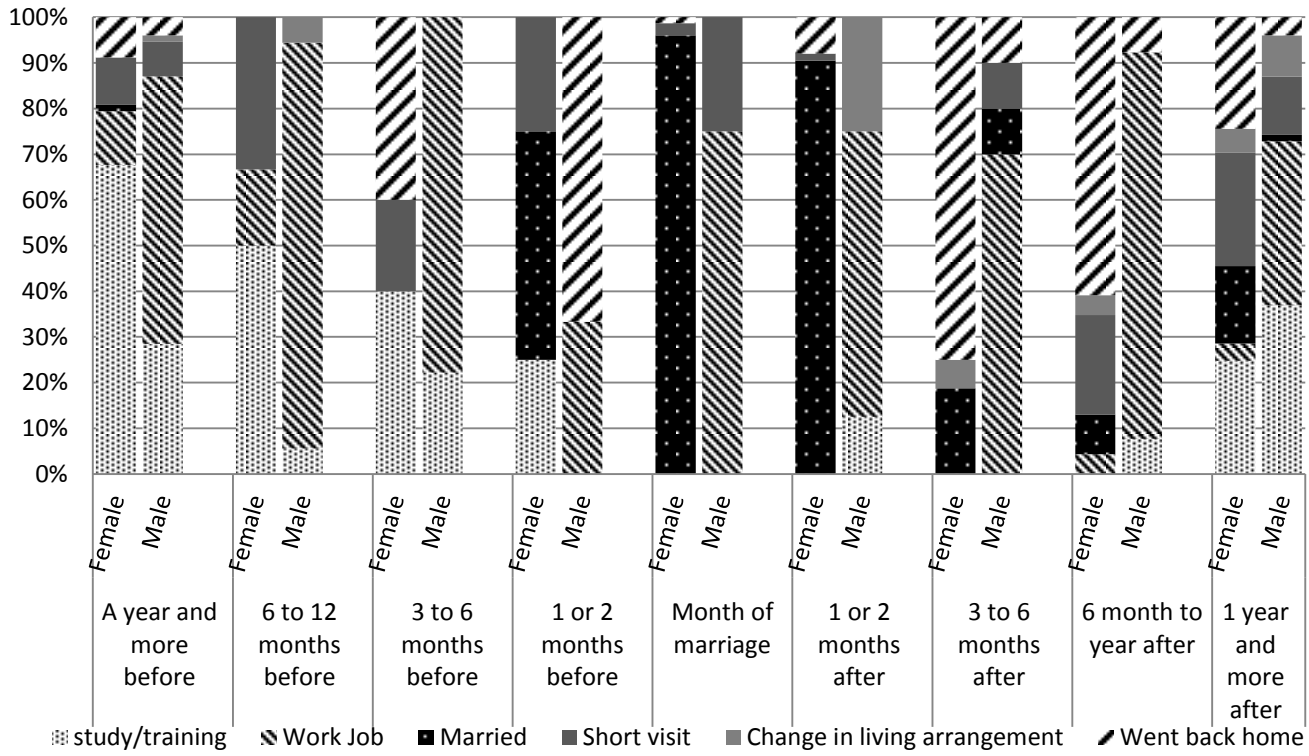

Figure 4. Predicted Probability of First Migration since 1997 by Educational Attainment and Marital Status, for hypothetical 20-24 year old Male and Female without Migration History in the *Full Monthly Registry* Sample, CVFS 1996- 2008.

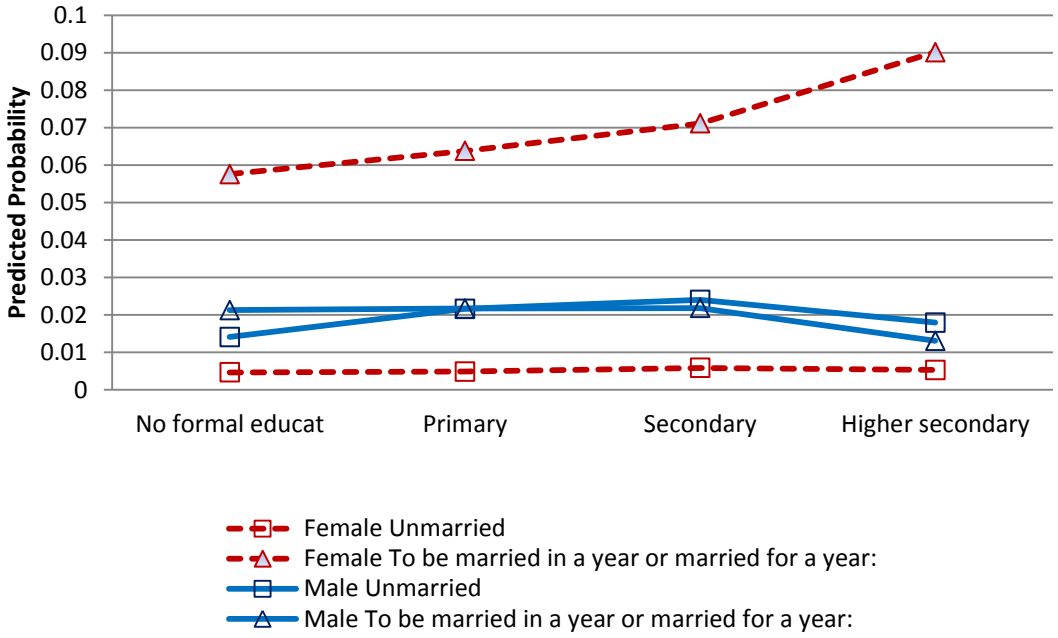

Figure 5. Predicted Probability of First Premarital Migration since 1997 by Education for Males and Females in the *Never-married Monthly Registry* Sample, CVFS 1996-2008.