ISSUES OF MARRIAGE TIMING IN DIFFERENT CULTURAL CONTEXTS

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ABSTRACT

YINGCHUN JI: Issues of Marriage Timing in Different Cultural Contexts
(Under the direction of Lisa D. Pearce)

This dissertation examines the interplay of economic and cultural motivations in the decision of when to marry. I draw on economic rational choice theory, social psychological reasoned action theory, and sociological norm theories to explain how economic and ideational factors pattern decision-making concerning marriage formation, both independently and interactively. I apply this approach to examine marriage timing in Nepal, and further investigate how marriage and education are juggled in Nepal. I then draw on the same theoretical approach to examine early marriage timing in the United States. In the context of Nepal, women's economic factors can both increase marriage rates and help buy economic independence to avoid early marriage, depending on how strong cultural and familial pressures are. Men's economic resources and pro-marriage cultural factors accelerate their transition to marriage, but under extreme cultural and familial pressure, economic factors have weaker effects. As to women's post-marriage education in Nepal, both women's and their parents' education level is related to their high rates of continuing schooling after marriage. Further, women whose parents had more involvement in their marriage formation are, in general, more likely to continue their education, compared to those who had more autonomy concerning their marriage decision. However, the relationship reverses at the level of university education, with more college women in love marriages continuing their

education than college women in arranged marriages. In the context of the United States, earnings potential tends to suppress the effect of early marriage expectation on early marriage. Further, it is moderated by social norms embedded in specific social contexts.

Where social norms favor early marriage, young people with good earnings potential speed up to marry early. This dissertation extends the economic and ideational approaches in family studies by examining the interaction between economic and ideational factors on marriage timing in different cultural contexts. I further reexamine the assumption of conflict between women's marriage timing and education pursuing in the Western, industrialized societies.

Built upon contextually extracted hypotheses, finding suggests that women juggle marriage and education with the support of historic culture and local family structure and kinship network in Nepal.

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INTRODUCTION

Marriage is a social institution that has been fundamental to societies throughout history. Pooling economic resources together, marriage usually provides financial securities to individuals living in the arrangement of this institution. Also, as a social unit, marriage is always under the regulation of cultural and social norms. Although both economic and ideational factors appear to be relevant to marriage, they can vary in how important and how salient they are across different cultures and societies. Further, it is possible for economic and ideational forces to be at odds with each other. The presence and power of both economic and ideational factors present many empirically intriguing questions to be answered. Take two kinds of societies as examples. Does money affect the timing of marriage in a society of universal and early marriage, considering that almost everyone marries and most people marry in a highly concentrated range of ages? Because marriage is universal, are personal attitudes still relevant to whether, when, and whom to marry? Or, turn to a society where the economic development level is relatively high and Western values of individualism are prevalent. Correspondingly, many individuals do not necessarily need to pool their economic resources for survival. Do economic concerns still affect marriage formation? Personal attitudes, aspirations, and expectations concerning marriage may be related to marriage formation. However, are social norms concerning marriage still relevant to marriage formation? Therefore, the use and integration of both the economic and ideational perspectives is a promising approach for further examination of the dynamics in marriage formation processes across a variety of settings.

Further, transition to marriage is related to role change from being single to being a spouse, daughter/son-in-law or even parents. In the Western, industrialized societies, literature argues that family and student roles are in conflict due to the fact that sufficient time and financial resources are necessary to run a house (Thornton, Axinn & Teachman, 1995). However, in many transitional societies, especially South Asian countries, extended family and patrilocal living arrangements after marriage are common (Caldwell, 1982; Caldwell, Reddy & Caldwell, 1988). This cultural practice and family structure may affect the family and student role conflict hypotheses extracted from the Western context in two ways, especially for women. 1) Living in a big family, the daughter-in-law may have very demanding housework and she may also have to take whatever other jobs available to financially contribute to the family. 2) The parents-in-law may have financial resources to support their daughter-in-law to continue her education if she has not completed it. Further, there may also be other family members available to share household duties.

In the field of social demography, economic and ideational approaches are two prominent perspectives on family formation. The gender specialization model puts forward that men and women exchange their comparative advantages in the labor market and through household production to maximize their welfare (Becker, 1991). Women with more education and a good job and income thus do not need to depend on men, can buy their economic independence, and as a result retreat from marriage. On the contrary, the spouse search model argues that educated women can afford longer time to find a compatible spouse and that financial resources can increase the economic interdependence among the spouses (Oppenheimer, 1994). Thus the economic advantage of both men and women is related to more marriage formation. More specifically, educated women may take a longer time to find

a spouse, but eventually they will have higher marriage rates.

Ideational theories of family formation greatly enrich the understanding of the motivations underlying marriage formation, independent of the motivation of economic benefit maximization (Axinn & Thornton, 2000; Cherlin, 1992; Hochschild, 1989; Thornton, Axinn & Hill, 1992). Ideational factors, such as attitudes, aspirations, expectations, and social norms concerning marriage play important roles in the transition to marriage formation (Brown, 2000; Carlson, McLanahan & England, 2004; McGinnis, 2003; Waller & McLanahan, 2003). However, the intricate dynamics of how economic and ideational factors pattern family formation can be much more complicated than simply including both factors in regression models, as if there is no interplay between the two.

This dissertation extends the existing literature in the following two ways. First, it examines the role of both economic and ideational factors, and the interplay between the two, in the timing of marriage in two settings, Nepal and the United States. For this research, I propose a theoretical framework that combines ideas from both economic and ideational approaches in studies of marriage formation. It draws on economic rational choice theory, social psychological reasoned action theory, and sociological norm theories to examine how economic and ideational factors pattern decision-making concerning marriage formation, both independently and interactively. Second, both Becker's and Oppenheimer's economic models imply that women either forgo or postpone marriage formation due to education pursuits. Further, other empirical research support that student and family roles are both commanding and thus competing for each other (citation). However, all the above research has been conducted in the Western context. This dissertation thus investigates whether women combine student and family roles simultaneously in the cultural context of Nepal.

To start, I examine marriage processes in the non-Western setting of Nepal, where marriage is near universal, but the average age at first marriage is rising. First, I look at how economic and ideational factors independently and interactively influence the timing of marriage. Next, I use both qualitative and quantitative data to examine women's post-marriage education continuation in Nepal. After that, I move to the context of the United States, where a retreat from marriage is argued to be occurring (Cherlin, 1992; Waite, 1995), and investigate how economic and ideational factors are related to early marriage. Finally, I discuss the limitations and strengths of this dissertation in the conclusion. In the following three sections, I briefly summarize each of the three papers of my dissertation.

Economic Resources, Personal Attitudes and Subjective Norms

The first paper of my dissertation adopts a theoretical framework that draws on economic rational choice theory, social psychological reasoned action theory, and sociological norm theories. I examine how timing of marriage is related to individuals' socioeconomic attainment, their attitudes and perceived family members' attitudes toward marriage, and the interactions between socioeconomic attainment and the latter two ideational factors.

This paper describes ways in which economic and ideational factors are independently and interactively associated with timing of marriage. Economic and ideational theories are woven together to develop setting-specific hypotheses that are tested using survey data from the Chitwan Valley Family Study. Findings show that both having more economic resources and having pro-marriage attitudes are associated with higher marriage rates, and there are interactions between certain economic and ideational factors, suggesting complicated mechanisms concerning the motivations underlying marriage formation processes. For women, economic factors can both increase marriage rates and help buy

economic independence to avoid early marriage, depending on how strong cultural and familial pressures are. For men, economic resources and pro-marriage cultural factors accelerate their transition to marriage, but under extreme cultural and familial pressure, economic factors have weaker effects. This paper extends the current understanding of the integration of economic and ideational approaches in studies of family formation behaviors.

The Alternative Route of Nepalese Women: Continuing Schooling after Marriage

The second paper of my dissertation use both qualitative and quantitative data to explore whether women continue their education after marriage and what characteristics of these women shape this unique family pattern. I first identify patterns emerging from the narratives of 20 semi-structured interviews. These findings are then woven with existing literature to suggest contextually relevant, alternative theoretical thoughts, and produce new hypotheses. I estimate logistic regression models using survey data from the Ideational Influence on

My findings show that a significant number of women who had not completed their education before marriage continue after marriage, and women whose parents were more educated have higher rates of continuing their education. Furthermore, the more education women have before marriage, the more likely they will continue their education after marriage. Women who had a combined marriage are more likely to continue their education compared to those with a love marriage. Women who had an arranged marriage are in general more likely to continue their education, compared to those with a love marriage. However, the relationship reverses for those with university education, with more college women in love marriages continuing education than college women in arranged marriages.

Marriage and Fertility Behaviors (IIMFB) to test new theories and hypotheses suggested.

Economic Potential, Marriage Expectations and Social Norms

The third paper uses the same theoretical framework as the first chapter of my dissertation. I again draw on the economic rational choice approach, the social psychological reasoned action approach, and the sociological norms perspective. I examine how adolescents' economic potential, their own marriage expectations, and social norms concerning marriage expectations within specific social contexts affect entry into early marriage, independently, and interactively. Specifically, interactions between adolescents' economic potential and their own marriage expectations, between their economic potential and social norms of marriage expectations will be examined. Data is drawn from the National Longitudinal Study of Adolescent Health (Waves I and IV).

Results show that individuals' academic success (indicative of higher potential earnings in the future) deters early marriage formation. Early marriage patterns vary by gender, race and ethnicity, and social class. Young adults from middle-class families tend to postpone marriage. I find that if individuals expect to marry early, they often do so regardless of socioeconomic background and demographic characteristics. Earnings potential, however, tends to suppress the effect of early marriage expectation on early marriage. Further, it is moderated by social norms embedded in specific social contexts. Where social norms favor early marriage, young people with good earnings potential speed up to marry early.

Theoretically, this research contributes to the field of family studies in investigating how economic and non-economic motivations underlying family behaviors interact. Empirically, it has significant implications for understanding why economic factors tend to differently pattern family formation for groups distinguished by gender, race and ethnicity, and social class. The results suggest that the varying economic impacts across groups are likely to be explained by variations in social norms among the groups.

CHAPTER 1

HOW ECONOMIC AND IDEATIONAL FACTORS INTERACT TO SHAPE MARRIAGE TIMING

INTRODUCTION

Family scholars and social demographers have long used an economic perspective to study marriage, fertility, and other behaviors associated with family formation (Becker, 1991; Caldwell, 1982; Davis, 1955; Easterlin & Crimmins, 1985; Notestein, 1953; Thompson, 1929; Willis, 1973). However, economic explanations for family formation have not always been satisfactory. Findings from the Princeton European Fertility Project show, for example, that fertility declines are not always closely associated with socioeconomic development. Instead, these declines occur in European countries with various levels of socioeconomic development and are bounded by homogeneous language and ethnicity (Coale & Watkins, 1986; Knodel & van de Walle, 1979). Further, research using data from the World Fertility Survey shows that in many developing countries, changes in demographic behaviors are not closely associated with levels of socioeconomic development (Cleland & Hobcraft, 1985). Results from all the above research suggest that non-economic ideational forces are likely to be significant contributors to family formation and changes. Family scholars usually use ideation to refer to broad non-economic or non-material forces such as values, attitudes, beliefs, social norms, religion, and culture (Jayakody, Thornton & Axinn, 2008; Lesthaeghe, 1983 & 1998; Lesthaeghe & Willems, 1999; Thornton, 2005; Thornton & Binstock, 2001).

The focus on ideational factors as a critical force in the formation and development of family and demographic behaviors began in the mid-1980s. In addition to socioeconomic development, individualistic values, secularization, and diffusion of information and ideas are believed to shape and change demographic and family behaviors (Cleland & Wilson, 1987; Coale & Watkins, 1986; Lesthaeghe, 1983; Mason, 1997; Pollak & Watkins, 1993; Preston, 1986; Watkins, 1996). More recently, Thornton (2005) emphasizes the role of *developmental idealism*, a set of values prioritizing modern society and family life, in shaping social and demographic behavior in non-western countries.

Some family scholars now incorporate both economic and ideational approaches in their work on family behaviors (Cherlin, 2005; Hirschman & Rindfuss, 1982; Lesthaeghe & Surkyn, 1988; Preston, 1985; Thornton, 2001). In studies where economic and ideational factors are jointly evaluated, they are generally conceptualized, measured, and tested as independent forces. It is likely that economic and ideational factors interact with each other to pattern family behaviors. Empirical evidence of high aspirations of marriage yet low marriage rates among economically disadvantaged groups in the United States suggests a possible interaction between the influences of ideational and economic factors on marriage formation; ideational factors may modify the influence of economic factors on the timing of marriage (Bulcroft & Bucroft, 1993; Cherlin, 2005; South, 1993). Some recent empirical studies include both ideational and economic factors in examining the timing of marriage (Carlson, McLanahan & England, 2004; Edin, 2000; Sassler & Schoen, 1999). Yet, the potential interactions between the two require more attention.

In this paper, I develop an interactive framework, which integrates both economic and ideational factors in the study of marriage formation, unlike much previous research in an

interactive fashion. The process of how socioeconomic attainment, attitudes, and subjective norms independently and interactively influence an individual's decision to marry is examined. Using data from the Chitwan Valley Family Study (CVFS) in Nepal, discrete-time event history models are estimated to examine how the risk of marriage is related to an individual's socioeconomic attainment and the interactions with the following ideational factors: his or her attitudes and subjective norms and parents' attitudes concerning marriage. By examining the interactions between economic and ideational factors in shaping the timing of marriage, this research contributes to the broad literature that integrates economic and ideational approaches in family sociology and demography. The interactive framework contributes to the understanding of variations in family formation behaviors of individuals from different socioeconomic and cultural groups in both Western and non-Western contexts.

SETTING

The setting for this research is the Chitwan Valley in Nepal. The Chitwan Valley is located in south-central Nepal, 100 miles southwest of the capital city of Kathmandu. The valley is nestled in the foothills of the Himalaya Mountains, 450 feet above sea level. Prior to the 1950s, the valley was a remote and isolated jungle. Assisted by the United States during the 1950s, the Nepalese government cleared forests, eradicated malaria, and turned jungle areas into farmland. In the late 1970s, the first year-round road and connecting roads from the Chitwan Valley to other cities in Nepal and India were constructed. At this time, Narayanghat, the largest city in the Chitwan Valley, became a major transportation hub in Nepal (Axinn & Yabiku, 2001; Yabiku, 2006).

Also during the 1970s, dramatic social changes occurred that transformed the organization of people's lives; services previously provided within the family (e.g., transportation, employment, and health care) began to be outsourced to nonfamily institutions. For the first time, individuals participated in nonfamily experiences such as schooling, nonfamily living, nonfamily employment, going to the cinema, and being exposed to mass media. These new social institutions and experiences helped to shape changes in individuals' family behaviors including fertility and marriage through both economic and ideational mechanisms, such as increased job opportunities and income, and exposure to mass media conveying Western values regarding family behaviors (Axinn & Yabiku, 2001; Yabiku, 2004, 2005 & 2006). In spite of striking social changes, the historical Nepalese family values and systems prevailed and marriage was the universal norm. The average age at first marriage in the Chitwan Valley was 17.6 years for females and 21.9 for males between 1990 and 1996 (Yabiku, 2005). However, changes relevant to family behaviors were evident.

During the transition from the 1970s to the present, parental authority lessened, and individuals gained increased autonomy and economic independence (Thornton & Fricke, 1987; Thornton & Lin, 1994). Barber (2001) finds that the emergence of nonfamily institutions cultivated more individualistic attitudes toward marriage. Her findings show that decision-making regarding marriage, previously controlled mostly by parents, is now shifting to a process that allows individuals more control.

With increased autonomy and economic independence, individuals can be more likely to make decisions concerning marriage in a more individual and utilitarian way. They may balance what they have to gain and lose when making decisions regarding marriage (Becker,

1991). In Chitwan, Nepal, individuals' level of educational achievement and employment is found to be associated with their choice of a spouse in relation to parental arrangement for marriage: With higher level of educational achievement or employment experience, individuals are more likely to choose their spouses rather than have the parents arrange the marriage (Ghimire et al., 2006). However, because of a long history of religious and social norms encouraging arranged marriages, individuals are still willing to allow parents some control over the marriage process (Barber, 2004; Ghimire et al., 2006). Individuals' attitudes, their perception of their parents' attitudes, and their parents' attitudes can all be important regarding marriage decisions in this setting. Thus, this set of factors provides rich fodder to examine the complicated interactions between economic and ideational forces in regards to marriage formation.

THEORETICAL FRAMEWORK AND HYPOTHESES

This research combines ideas from economics, social psychology, and sociology to examine how economic and ideational factors shape individuals' decisions concerning marriage formation. The economic approach of rational choice is restricted to an isolated individual who balances costs and benefits to maximize utility (Becker, 1991). In contrast to the individualistic approach of rational choice, the social psychological approach of reasoned action theory considers both personal attitudes and subjective norms influenced by *significant others*, such as family members, friends, and neighbors (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). A sociological perspective regarding social norms emphasizes an understanding of behaviors regulated by social norms in relevant social contexts. Each

approach may partially explain the dynamics underlying individuals' decision-making regarding marriage formation. This paper, thereby, asks whether the motivations underlying individuals' decisions regarding marriage are rational, reasoned, driven by social norms, or a combination of all of these.

Costs and Benefits Calculation: Rational Choice?

Gary Becker's (1991) New Home Economics approach applies an individualistic rational choice perspective to the area of family including marriage, divorce, and fertility as well as relationships among family members. Linking activities at the micro-economic (individual) level to trends at the macro (societal) level, the approach assumes that individuals are forward-looking, consistent in their behaviors, and act to maximize their welfare. According to Becker (1991), individuals are not however, completely free in their behaviors; their actions are restricted by limited resources. Lack of information or opportunities can also restrict individuals' decision-making. Time is a finite resource running throughout the life course. As the provision of goods on the market increases, time becomes more valuable when individuals are faced with increased choices during the limited life span. Thus, individuals balance the costs and benefits of their choices regarding the attainment of certain goals.

The rational choice approach, applied to family formation, posits that in marriage, men and women exchange their respective comparative advantages in the labor market and household work, thus maximizing both their individual and collective welfare (Becker, 1991). Following this logic, men's economic resources, such as employment, income, and education, are predicted to be positively associated with marriage rates; women's economic

resources are predicted to be negatively associated with marriage rates, considering that women's economic independence reduces what they can gain from marriage based on exchange through the marriage bond (Becker, 1991; Moffitt, 2000; Teachman, Polonko & Leigh, 1987; Trent & South, 1989).

Past research supports the positive effects of men's employment, income, and schooling on marriage formation (Goldscheider & Waite, 1986; Lichter et al., 1992; Marini, 1980; Marini & Fan, 1997; Oppenheimer, 2000; Rosenfeld, 1980; Rosenfeld & Kalleberg, 1990). In the setting of Nepal, numerous studies also identify positive effects of employment and educational attainment on marriage formation for men (Niraula, 1994; Yabiku, 2004, 2005 and 2006a). Becker's (1991) individualistic economic approach, thus, can be used to predict the same pattern of association between economic resources and marriage timing for men in the Chitwan Valley.

Compared to research on men, research on women's economic resources provides mixed findings. Some research suggests negative effects of women's economic resources on marriage formation (Martin, 1995; Singh & Samara, 1996). Others find no effect of women's economic resources on marriage formation (Manning & Smock, 1995; Xie et al., 2003). Still others confirm the positive effects of women's education and employment on marriage formation (Bloom & Bennett, 1990; Goldscheider & Waite, 1986; Goldstein & Kenney, 2001; Lichter et al., 1992; Oppenheimer, 1994). In the setting of Nepal, Axinn (1992) reports that husband's employment increases the use of fertility limitation while wife's has no effect for an ethnic minority group in rural Nepal. In regards to marriage formation, some find education and employment to have positive effects and others find negative effects (Aryal, 2006; Niraula, 1994; Yabiku, 2004, 2005 & 2006b).

The reported negative association between timing of marriage and economic resources for women is likely due to a temporal conflict between time invested in human capital accumulation and the normative timing of marriage. Sweeney (2002) finds that for younger cohorts of women, education has a positive effect on marriage; for older cohorts of women, the effect appears to be negative. This change in the effect of education is likely because for older cohorts of women, high educational attainment may have meant they were in school past the normative age of marriage and were therefore less likely to find a partner, but women from younger cohorts were able to complete their education before the normative age for marriage, which is sufficiently postponed, compared to that to old cohorts.

Goldscheider and Waite (1986) confirm education effects to be sensitive to the timing of marriage. Although school enrollment may have the effect of postponing marriage due to the conflict between student and family roles (Tambashe & Shapiro, 1996; Thornton, Axinn & Teachman, 1995; Yabiku, 2006), after schooling is completed, marriage rates eventually increase.

This study argues that on average, educational attainment does not necessary deter marriage formation for women in the Chitwan Valley. There are two scenarios where there could be no conflict between marriage timing and time invested in education and in preparation form employment for women. Marriage timing may be positively associated with economic factors for women if the normative timing of marriage for women is sufficiently postponed or if women do not normatively invest long years in education. Women in the Chitwan Valley have an average of 4.7 years of education, and are on average 17.6 years old at first marriage (Yabiku, 2005). Therefore, the second scenario applies to women in the Chitwan Valley.

However, does the rational choice approach work inNepal, a country in transition from a family-centric status quo to a society more largely organized by forces beyond the family? During this transitory period, individuals have more autonomy, agency, and economic independence (Thornton & Fricke, 1987; Thornton & Lin, 1994). Their increased agency and economic independence likely provide increased flexibility to make decisions concerning marriage based on their economic benefits rather than out of obligation to their parents. Yabiku's (2006) research in the Chitwan Valley further implies that changes in economic potential are related to the timing of marriage. In this setting, the two individual-level socioeconomic factors I expect to be most related to the timing of marriage are nonfamily employment and educational attainment; these two prominent opportunities relevant to income are among the many dramatic social changes that have occurred in recent decades.

This paper hypothesizes that for both men and women, higher education and having employment experiences are regarded as economically attractive traits in the marriage market, and will facilitate an individual's earlier movement to marriage. However, enrollment in school is usually in conflict with the family role (Thornton et al., 1995; Yabiku, 2006), and is likely to have a negative effect on marriage timing in the Chitwan Valley.

Individual Attitudes and Subjective Norms: Reasoned Action?

Rational choice theory is criticized for its purely economic perspective, or as some say, comparing "having a baby" to "buying a car" (Blake, 1968; Hirschman, 1994). Aside from economic benefits pursuing, attitudes and social norms are also theorized to be important factors that influence the complicated decision-making process (Blake, 1968).

Some have argued that whether individuals adopt the economic benefits maximization approach depends on their attitudes toward the socially acceptable thing to in their social roles (March, 1994; Montgomery, 1998). Thus, for complicated processes such as marriage timing, it seems essential to consider attitudes and other ideational factors in addition to economic calculations or rational choice.

Fishbein and Ajzen's (1975; Ajzen & Fishbein, 1980) theory of reasoned action argues that individuals' behavior is determined by their intention to conduct a certain behavior, such as marriage. According to the reasoned action theory, individuals' intention to marry young is a function of their attitudes and subjective norms. Individuals' attitude determines the evaluation of the potential outcome. Their subjective norm is the perception of family and friends' acceptance of their behavior. The term *subjective norm*, used in this context, embeds individuals in the social context of significant others, which is in contrast to Becker's (1991) focus on isolated individuals. In addition to economic calculations, attitudes and subjective norms, such as perceptions of parents' and neighbors' attitudes, and social norms can have an independent effect on family formation (Aryal, 2006; Axinn, Clarkberg & Thornton, 1994; Barber & Axinn, 1998a; Barber & Axinn, 1998b; Yabiku 2006b). It is worth noting here that attitudes can be relevant to both economic and noneconomic concerns, while subjective norms, embedding individuals in a social context, may reflect more of the noneconomic motivations underlying decision-making.

Empirical research also confirms that positive attitudes toward marriage can increase marriage rates (Carlson et al., 2004; Harknett & McLanahan, 2004; Sassler & Schoen, 1999). Corresponding to the reasoned action perspective, it is likely that attitudes and subjective norms shape marriage formation, independent of one's socioeconomic attainment. In the

setting of the Chitwan Valley, marriage is nearly universal, and age at first marriage is young (Yabiku, 2005). Although individual autonomy has increased, some are still willing to defer to local culture and familial authority (Barber, 2001). Therefore, it is reasonable to expect relevant attitudes and subjective norms to be closely associated with marriage timing in the setting of the Chitwan Valley, including attitudes concerning ideal marriage age, the timing of marriage in relation to menstruation, and the perception of mother's attitude concerning the importance of marriage. In Chitwan, Nepal, individuals are still willing to allow parental control over their marriage formation (Barber, 2001), and this is testament to the relevance of parental attitudes. I hypothesize that, independent of socioeconomic attainment, those who have, and whose parents have, more favorable attitudes and subjective norms concerning marriage will marry sooner.

An Interactive Approach—Economic Versus Non-Economic Motivation Interaction

Combining rational choice theory, reasoned action theory, and the social norm perspective, this study proposes an interactive framework. It argues that individuals' decision-making process regarding family behaviors involves not only economic consideration, but also relatively non-economic concerns, such as attitudes, subjective norms, and social norms. It is likely that economic calculations and non-economic motivations shape family behaviors, both independently and interactively.

Theory and evidence from previous studies suggest that both ideational influences and economic calculations shape decision-making regarding marriage. The extension of rational choice theory via role theory and the social norm perspective appears to help further synthesize the two approaches (March, 1994; Montgomery, 1998). Individuals correspond to

their roles by either following "the logic of appropriateness" toward a social norm obedience behavior, or by following "the logic of consequences" toward an economic benefit pursuing behavior. For example, a friend is obligated to cooperate consistently with the expectation that reaping profits from friends is not socially appropriate. However, a business person is motivated to maximize economic benefits because profit pursuing is expected from someone in that role (Montgomery, 1998). These examples show that individuals tend to follow what they deem as socially acceptable in different social contexts. This is consistent with the idea of social norm obedience: A social norm compliant person (non-rational actor) chooses to behave appropriately in specific social contexts for social approval instead of pursuing utility maximization (Bourdieu, 1977).

Therefore, whether an individual makes the rational choice to maximize his or her own welfare depends on the attitudes, subjective norms, and perceived social norms regarding what is acceptable in the specific context. That is to say, an individual takes into account both economic and noneconomic concerns when faced with various real-life situations. The subjective norm and social norm perspectives contribute to the understanding of ideational factors in that the dynamics of individual attitudes and subjective norms should always be interpreted in the social context.

For example, when making a decision regarding marriage formation in Chitwan Valley, Nepal, sons and daughters may factor in their mothers' feelings about the importance of getting married. If they do not value their mothers' opinions, economic calculations might be more salient and have stronger effects on marriage formation for these people. In contrast, if they regard getting married as very important to their mothers, they may consider the economic benefits associated with marriage timing as secondary. Here, economic concerns

can be both consistent and in conflict with mother's opinion regarding importance of marriage. If the economic concerns are consistent with mothers' opinion, economic factors can have stronger effects. However, if the economic concerns are in conflict with mothers' opinion, economic factors can have weaker or no effects on marriage formation. Therefore, economic calculation and subjective norms can interactively pattern marriage timing. The interaction can also apply to individuals' and their parents attitudes regarding marriage with economic factors.

The possible interactions between economic and ideational factors are also suggested by a body of empirical research. Greenman and Xie's (2008) study on the effects of gender and race/ethnicity on income inequality shows that cultural differences across race/ethnicity help explain variations in the gender income penalty for White, Black, Hispanic, and Asian women in the United States. Although their study focuses on variations in the gender income penalty explained by cultural differences, it is likely that individual socioeconomic attainment shapes the timing of marriage differently if individuals have different attitudes and subjective norms concerning marriage. In general, past empirical studies about marriage have found that most adults expect to marry, and that there is little variation in social groups from different socioeconomic backgrounds (Bulcroft & Bucroft, 1993; Cherlin, 2005; South, 1993). However, economically affluent people are much more likely to marry than their less affluent counterparts, although both groups hold similarly positive feelings about marriage. The implication is that an individual with positive attitudes toward marriage may be more likely to get married on the condition that he/she acquires sufficient economic resources to make marriage affordable. Bulcroft and Bulcroft (1993) suggest that for many individuals who have positive attitudes toward marriage have not got married because they have not

found a "financially ready" partner. This further suggests the likelihood of interactions between economic and ideational factors with respect to marriage formation.

Hirschman and Rindfuss (1982) find that socioeconomic traits, such as urban/rural origin and education and various cultural factors, contributed to variations in the order and timing of family formation events among five different populations in four Asian countries and regions. Furthermore, the Chinese preference for male children may explain the expedited first birth after marriage among highly educated Chinese women from both Taiwan and Malaysia compared to other highly educated women from Korea, Thailand, and Malaysia. Their finding suggests that the education effect on the timing of first birth after marriage is conditional on culture. A similar pattern is likely to apply to marriage timing; socioeconomic attainment can shape marriage formation, depending on ideational factors such as an individual's attitudes and subjective norms toward marriage.

Based on the above research, this interactive approach argues that social norms and culture provide a platform on which economic calculations (primarily economic concerns) operate. That is to say, social norms can help define acceptable ways to pursue economic benefits. For example, when a male-breadwinner family is the social norm, individuals likely pursue economic benefits by forming this kind of family, which emphasizes on men's market competency and women's household production. However, when ideational changes occur so that society is more accepting of the dual-breadwinner family, individuals may choose this family mode to gain best benefits, which emphasizes on both men and women's economic potential or resources. Depending on their personal attitudes, subjective norms, and social norms regarding what they believe in are the socially acceptable and ideal family pattern, they will conform to either the male-breadwinner or the dual-breadwinner model. It is

necessary to note that the motivation of economic-benefit maximization is not always in conflict with obedience to social norms. Individuals driven by either economic or non-economic motivation balance the two in different social contexts. Therefore, economic concerns can interact with motivations to obey social norms, depending on how strongly individuals hold their personal attitudes and subjective norms relevant to certain social norms.

The contribution of this interactive framework, compared to the rational choice approach, lies in its emphasis on both economic and non-economic motivations (social norm obedience if it does not involve economic benefit maximization). Furthermore, the two are believed to interact in the real decision-making process. In reality, it is difficult to separate economic concerns from noneconomic concerns in individuals' decision-making processes. Attitudes can include both monetary and nonmonetary concerns. Social norms can regulate both economic calculations and noneconomic considerations.

This research does not directly measure either economic or noneconomic motivations. Rather, the focus is to examine the interaction among the commonly used socioeconomic indicators and some contextually relevant ideational indicators regarding marriage formation. Ultimately, the results will contribute to understanding the entangled economic and noneconomic motivations underlying family behaviors and help to improve the theoretical framework guiding the study of family formation behaviors.

Thus, this study presents analyses that examine how socioeconomic attainment and various attitudes and subjective norms about marriage interactively shape the timing of marriage in Nepal's Chitwan Valley. I hypothesize that individuals with higher

socioeconomic attainment, such as more education or having employment experience, are more likely to marry earlier than their less affluent counterparts. At the same time, I expect that individuals' preference or parental preference (or perceived parental preference) for early marriage is related to earlier marriage. Furthermore, I expect that the effects of socioeconomic attainment on marriage formation are conditional on the effects of attitudes and subjective norms toward marriage formation.

DATA AND METHOD

Data

Survey data from the Chitwan Valley Family Study (CVFS) is used for the analyses. I use data from the 1996 Individual Survey and 126 months of the monthly Household Demographic Registry collected from 1997 throug 2007. Using a systematic probability sample, the CVFS examined social changes and family behavior for 5,721 individuals living in 171 neighborhoods with a response rate of 97 percent. In this study, a neighborhood is defined as a geographic cluster of 5-15 households. The CVFS employs a life history calendar method to measure individual-level data (Axinn, Pearce & Ghimire, 1999). Interviews were conducted for each resident of ages 15-59, and their spouses in all 171 neighborhoods. The sample for my analyses is limited to 809 individuals who, in 1996, were unmarried and aged 15-20, following Yabiku's strategy in his 2006 study to limit the sample to a young cohort. The analytic sample is limited to a young cohort of men and women for two reasons: (a) Age at first marriage in Nepal is quite young, and (b) the inclusion of never-

married individuals older than 20 in 1996, who are quite unusual in this setting, would bias the sample to unusual cases with unobserved heterogeneity (Yabiku, 2006a).

Dependent Variable

The outcome of interest is marriage timing. Individuals are coded as 0 if they were not married during the 126-month observation period beginning in 1996. If they were not married by the end of the observation period, their values remain 0 and become right censored. If they married during any month, they are coded 1 in that month and no longer contribute to the subsequent person-month risk. Because time is precise to the month, I use discrete-time hazard models to examine the risk of getting married every month. The person-period risk is therefore person-month.

Independent Variables

Socioeconomic Attainment. I use work¹ and education to measure socioeconomic attainment. Work is defined as holding a salaried job, wage labor, a position in a family-owned business, or military service. If individuals were engaged in any of these work situations before 1996, a dichotomous variable for work is coded as 1; otherwise it is coded as 0. Two measures of education are used: school enrollment in 1996 and highest year of schooling in 1996. The CVFS Individual Survey data only include educational information through 1996; the monthly household registry that collected family formation information after 1996 does not have any information related to education. Past research shows accumulated years of schooling in the Chitwan Valley to be relatively low; on average, 7.5 years for males and 4.7 years for females (Yabiku, 2005). As shown in Table 1, average year of schooling is less than 7 for women and less than 8 for men. Because a significant number of respondents were still

enrolled in school in 1996 and had not yet completed their educations, I use highest year of schooling in 1996 to approximate the completion of education, while controlling for school enrollment.² School enrollment was coded 1 for those who were enrolled in 1996 and otherwise 0.

Individual Attitudes and Subjective Norms. I use two indicators to measure individual attitudes regarding marriage. The first indicator measures the ideal age for marriage, constructed from two questions: What do you feel is the ideal age for a man to get married these days? and What do you feel is the ideal age for a woman to get married these days? I first calculate the ideal marriage age for each individual by assigning the value for the ideal age for a man and the value for the ideal age for a woman to the corresponding gender. To capture the dynamics of time, I construct a time-varying variable: reached the ideal age for marriage. Those who had not yet reached their ideal age for marriage during the observation months are coded as 0; those who had reached or passed their ideal age for marriage are coded as 1. The second indicator measures individuals' attitude concerning the timing of marriage relative to menstruation. This was constructed from the survey item: A girl should be married before her first menstruation. Respondents were asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the statement. The response categories are coded so that a higher value indicates more agreement with a girl needing to marry before menstruation.

The subjective norm is measured using a question about individuals' perception of the importance that the mother placed on marriage: *How important do you think it is to your mother that you get married soon? Would you say very important, somewhat important, or*

not important at all? The responses are coded so that a higher value indicates a higher perception of importance to the mother.

To further capture the dynamics of non-economic motivations in this context where parents still maintain control over their children (Barber, 2004; Ghimire et al., 2006), I also create two variables measuring parental attitudes. One is based on these survey questions: What do you feel is the ideal age for a man to get married these days? and What do you feel is the ideal age for a woman to get married these days? The other is on the survey item: A girl should be married before her first menstruation. Because the 1996 CVFS collected data from everyone with ages of 15-59 in the household, I am able to create measures for parents. The construction of the variables for parents is similar to the variables for respondents based on the same questions. For these measures, one issue merits noting. Not all individuals lived with their parents, and as a result, there are a number of missing values for parents' beliefs about ideal marriage age and about marriage relative to the onset of menstruation. Therefore, special caution is needed when interpreting parental attitude measures. The results of statistical models involving parental measures are only representative of those who lived with their parents in 1996. The parental measures help explain how different ideational factors contribute to marriage formation in the unique social context of Chitwan, Nepal. Control Variables. The analysis controls for time, age, migration status, marriage month, caste/ethnicity, family socioeconomic status (SES), and mother's number of children. To better control gender effects, I split the sample by gender and estimate corresponding models for men and women, separately. Time is measured in months, which collapses the risk exposure to marrying into monthly units. Gender is coded as 1 for females and as 0 for males. Age is measured in years. Migration status is measured by two variables. One variable

measures whether the respondent had ever migrated by 1996. The other measure³ is a time-varying variable, lagged for a month, indicating whether the respondent had ever migrated since 1996. In the Nepali culture, there are popular marriage months and less popular ones (Yabiku, 2006). I create dummy variables for each month of the year⁴. Caste/ethnicity includes five categories: High-caste Hindu, Low-caste Hindu, Newar, Hill Tibeto-Burmese, and Terai Tibeto-Burmese.

Family SES is measured using three variables: family economic resources (FER), whether father ever had work experience, and father's highest year of schooling. Six variables are used to measure FER: household quality, household possessions, owning wet land, amount of wet land, owning dry land, and amount of dry land. House quality is a scale measuring the quality of the house, including number of stories, wall, roof, and floor materials. The measure for household possessions is a scale measuring the amount of household consumption items such as televisions, radios, bikes, and farm tools. For analytic convenience, principle component analysis is used to reduce the number of (FER) variables. Number of children measures how many children the respondent's mother had given birth to. *Analytic Strategy*

Model Building. Event history analysis is used to analyze the data. Because time is precise to the month, I use discrete-time hazard models to examine the influence of covariates on the risk of marrying. Each individual had multiple cases of time (month) until the event of marriage occurred, except those who married in the first month. The hazard model used to estimate the monthly risk of getting married is:

$$Log (p/1-p) = \beta_0 + \mathbf{X}_k \mathbf{\beta}_k,$$

where \mathbf{X} is the vector of explanatory variables, and $\boldsymbol{\beta}$ is the vector of parameters of the explanatory variables. The analysis unit is person-months. By exponentiating $\boldsymbol{\beta}$, the result represents an odds ratio, which approximates the probability of those getting married versus the probability of those not yet married. The odds ratio estimated by the discrete-time hazard model is equivalent to the hazard in the event history analysis: a hazard equal to 1 represents no effect, less than 1 represents a negative effect, and greater than 1 represents a positive effect on marriage timing. The models examine the main effects of economic indicators, attitudes, and subjective norms concerning marriage. Also included is an analysis of the interaction effects between economic and ideational factors.

One feature of the CVFS design is that individuals are clustered within neighborhoods. Inflated standard errors are a prominent issue (Raudenbush & Bryk, 2002). I use Proc GENMOD with SAS 9.1 to estimate the discrete-time hazard models⁵. The models estimate the correlations among all the neighborhoods and correct the possibly inflated standard errors.

RESULTS

Descriptive statistics for men and women are reported in Table 1.1. During the 126 months observation period of 1997 through 2007, 88% of the female respondents and 72% of male respondents got married. In the setting of Nepal, men tend to marry younger women and tend to marry later than women. Men probably have to establish themselves financially before family formation. Half of the men and women had worked by 1996. The average highest year of schooling by 1996 was slightly less than 7 for women and slightly less than 8

for men. However, the similar numbers could have different stories: Many women might have completed or be close to completing their educations, while a certain number of men might still have a long way to go before finishing their educations because men usually have more years of education than women (Yabiku, 2005). About 70% men and women were still enrolled in school in 1996. By the end of the observation, 52% of women and 43% of men had reached their reported ideal marriage ages, while 60% of women and 31% of men had reached their parents' reported ideal marriage ages.

Combining with the gender disparity in marriage rates by the end of the observation, the indication is that men not only marry later than women, but this practice could be influenced by certain cultural beliefs and social norms. There also seems to be a gendered pattern in attitudes towards the cultural belief that girls should marry before menarche. Women were almost twice as likely as men to *strongly disagree* (11% women and 6% men) with cultural belief, while they were same likely to *strongly agree* with it (around 7.5% for both women and men). The average score of parents' answers concerning the cultural belief was about 2.5 for both male and female respondents, falling between *disagree* and *agree*, but closer to *agree*. Concerning the importance for the respondents getting married for the mothers, about 57% of women and 47% of men answered *not important at all*, and about 9% of women and 15% of men answered *very important*.

For the control variables, the average age of men and women was about 17 in 1996, with women slightly younger than men. High-caste Hindus made up the majority of men and women (about 53% and 57%). Slightly more than a fourth of the women and slightly less than a third of the men had ever migrated from their birth neighborhood by 1996. However, 88% of women and 59% of men had ever left their 1996 neighborhood by the end of the

observation time. The figures after 1996 indicate a gendered migration pattern: Women usually move in with their husbands' families after marriage which is supported by the coincidence of 88% of women getting married and 88% of women leaving their 1996 neighborhoods by the end of the observation period. However, men's migration is more likely work related, such as moving to Southeast Asian and Middle Eastern countries to make money before returning home to marry. In regards to monthly distribution of marriage timing, men and women were more likely to get married in February, March, May and July, with July being the peak month of marriage (about 21% women and 34% men). The average scores of family economic resources were 0.38, 0.14, and 0.26 for women and 0.36, 0.18, and 0.26 for women, based on components 1 through 3, respectively (see Table 1 for range). Slightly less than half of the women's fathers and 61% of the men's fathers had worked. The average year of schooling of respondents' fathers was slightly less than 4 years for women and slightly more than 4 years for men. The average number of children that respondents' mothers had birthed was slightly more than 5 for women and fewer than 5 for men.

Table 1.2 presents the multivariate analyses examining effects of economic and ideational measures for women. Models 1 through 7 separately examine effects of each socioeconomic measure, including employment and education, and each ideational measure, including attitudes and subjective norms of individuals and attitudes of their parents. Model 8 is the full model including all economic and ideational measures. Each model estimates all control variables: time, age, caste/ethnicity, migration before and after 1996, marriage month, family economic resources, whether father had worked, father's highest year of schooling, and mother's number of children. The results reported are odds ratios.

In contrast to my hypothesis, Model 1 shows no direct effect of employment on marriage formation for women. However, the later interaction models show that employment can have positive, negative, or no effects, depending on various ideational factors. In Model 2, years of education is positively related to marriage formation while enrollment in school has a negative effect for women. A woman with 7 years of education is estimated to have a marriage hazard about 50% higher than that of a woman with no education. School enrollment decreased marriage rates by 33%. Surprisingly, in Model 3 the time-varying variable, whether an individual had reached ideal marriage age did not have a direct effect on marriage timing. However, the later interaction models show that the lack of direct effects for this ideational variable is due to interaction with employment and educational attainment. Model 4 examines the attitude toward the cultural belief that girls should marry before menarche. All the respondents had lower marriage hazards (34% lower for the *strongly* disagreed, 42% lower for the disagreed, and 55% lower for the agreed) than those who strongly agreed with the cultural belief. Models 5 and 6 show no direct effects for the importance that individuals place on the mothers' beliefs toward marriage and parental attitudes regarding ideal marriage age. Surprisingly, Model 7 shows that, the more the parents support the cultural belief regarding girls marrying before menarche, the lower the women's marriage hazards. A possible explanation is that maybe the young women think that this cultural belief is outdated and no longer relevant. Therefore, the more parents stick to the culture, the more the daughters rebel to them.

Model 8 is the full model. Compared to Models 1 through 7, all the independent variables remain similar effects, except that parental attitudes towards girls marrying before menarche is no longer significant. All three ideational measures relevant to parents, either

parental attitudes or respondents' perceptions of their mothers' opinions regarding importance of marriage, have no direct effect on women. For the control variables, Terai Tibeto-Burmese had marriage hazards 43% lower than that of High-caste Hindus, which is consistent with the previous research (Niraula, 1994). Those who had ever migrated before 1996 had marriage hazards 65% higher than those who had not migrated, while migration after 1996 does not show much of an effect. The possible explanation is that migration during younger years likely exposes the respondents and their families to more people and helps build more connections. It thus increases these women's marriage hazards. However, migration after 1996 probably captures mostly the moving of wives to their husbands' families after marriage. One component of family economic resources (using Component Principle Analysis) is shown to deter marriage formation. It is likely that women from rich families can use the family economic resources to leverage the pressure from the historical early marriage pattern in Nepal.

Table 1.3 examines men's marriage formation, estimating the same variables as Table 1.2. Model 1 shows significant and positive effects of employment. Those who had worked had about 1.6 times the marriage hazards of those who had not. Surprisingly, in Model 2 both years of education and school enrollment show negative effects on marriage formation for men. A possible explanation is that many men in this sample had not yet completed their educations by 1996. Further, men have a long way to go to establish themselves financially after completing their educations. Therefore, educational attainment may deter marriage formation for men initially. However, eventually, it will increase marriage rates for men. In a later interaction model (Model 8, Table 1.4) educational attainment has a positive effect on marriage formation, depending on parents' attitudes regarding girls marrying before

menarche. Model 3 shows no direct effect on marriage formation for whether individuals had reached the ideal marriage age. In Model 4, in response to the survey question regarding girls marrying before menarche, men who *strongly disagreed* with the cultural belief had 64% lower marriage hazards and men who *disagreed* had 29% lower hazards than men who *strongly agreed*. Model 5 also shows a significant effect of the subjective norm regarding marriage importance to one's mother. Those who deemed it as *not important at all* had marriage rates 50% lower and those who regarded it as *somewhat important* had hazards 75% lower than those who deemed it as *very important*. Surprisingly, Model 6 shows those who had reached their parents' ideal marriage age had marriage hazards 27% lower than that of others who had not. There are two possibilities here. Either, these men are rebelling to their parents. Or, usually parents expect their children to marry early while men have to wait for long time to financially establish them. Model 7 does not show direct effects for parental attitudes towards girls marrying before menarche, although later interaction models (Models 7 and 8, Table 4) show interactions of the above parental attitudes with both employment and educational attainment.

Model 8 jointly estimates all the above variables and control variables. Reaching the ideal marriage age now has a significant effect. Those who had reached their ideal marriage age had marriage rates about a fourth higher than that of those who had not. The attitude regarding girls marrying before menarche has a weaker effect after including all the other variables. For the control variables, age is positively associated with marriage formation for men. This is different from women. Again, it indicates that men tend to marry late until more or less financially established. Migration after 1996 doubled men's marriage rates. This is in sharp contrast to women. Men's migration at older ages can be associated with moving to

Nepalese men go to Southeast Asian and Middle Eastern countries to make money before returning to marry in Nepal. Father's years of education tends to deter men's marriage formation. For example, a man whose father has 4 years of education has a marriage hazard one fourth lower than that of a man whose father has no education. Some research suggests that father's education serves as an ideational influence during the childhood time on adult family formation behaviors (Axinn & Yabiku, 2001). Mother's number of children is associated with a decrease in marriage hazards. In Nepal, the couple usually lives with the husband's parents after marriage, and sons usually inherit most of parents' property. The number of a man's siblings, especially brothers, thus might affect a man's economic attractiveness on the marriage market⁶. Therefore, to examine the effect of family economic resources on men's marriage formation, it is important to control for number of siblings or brothers.

Table 1.4 presents all significant interaction effects between economic and ideational measures, as reported in Models 1 through 3 for women and in Models 4 through 8 for men. Models 1 and 2 show that the effect on marriage timing of whether a woman had work depends on whether she had reached the ideal marriage age and her attitude regarding girls marrying before menarche. In Model 3, there is a significant interaction between years of education and whether a woman had reached the ideal marriage age on marriage formation for women. Models 4 through 7 show significant interactions between employment and the following various ideational factors on marriage formation for men: a man's attitude regarding girls marrying before menarche, his subjective norm concerning marriage importance to his mother, whether a man had reached his parents' ideal marriage age, and

parental attitudes towards girls marrying before menarche. Model 8 demonstrates a significant interaction between years of education and parental attitudes towards girls marrying before menarche.

Figures 1.1 through 1.8 provide graphic presentations of odds ratio results of the 7 interaction models in Table 1.4. It is clear from Figure 1 that for women who had reached the ideal marriage age, employment has a strong positive effect on marriage formation. However, for women who had not reached the ideal marriage age, employment has a moderately negative effect. It is likely that women who had reached ideal marriage age are under the cultural pressure to get married soon. If they also had some employment experience, they are probably regarded as economically attractive candidates by men looking for wives. Therefore, with the pressure from culture and attractive traits with respect to economic concerns to men, these women are more likely to marry early than their counterparts without work experience. However, it is a different story for women who had not reached the ideal marriage age. First, these women are not under great cultural pressure to marry soon. Further, without much cultural pressure, women with employment experience may have some economic leverage to counter the historical early marriage pattern in Nepal, as compared to their counterparts without employment experience. Therefore, economic factors can have both positive and negative effects on marriage formation for women, when interacting with certain ideational factors.

In Figure 1.2, employment has a negative effect on marriage formation for women who *strongly disagreed* with and women who *agreed* with the cultural belief regarding girls marrying before menarche. In contrast, it has a positive effect for women with moderate attitudes towards this cultural belief. Again, it is likely that for women who *strongly*

disagreed with the cultural belief, employment experience gives them economic leverage to avoid the historical Nepalese early marriage pattern. For women who were moderate (disagreed and agreed) when it comes to this cultural belief, employment experience, which is regarded as economic attractiveness on the marriage market may facilitate their entering marriage earlier. For women who strongly agreed with this cultural belief, those without employment experience may recognize their economic disadvantage on the marriage market, and thus actively search out marriage partners, not waiting long for ideal candidates. Therefore, the seemingly negative effect of employment for these women is actually the result of the strong effect of cultural pressure. Figure 1.3 demonstrates that for women who had reached the ideal marriage age, education does not have an effect on marriage formation, while for women who had not reached the ideal marriage age, education is positively associated with marriage formation. Again, for women having reached the ideal marriage age, cultural pressure is the prominent motivation and pushes them to marry at earlier ages, not leaving much room for economic calculation. For women who had not reached the ideal marriage age, without much cultural pressure, economic calculation is the more prominent force influencing women to marry earlier.

Figure 1.4 illustrates that employment does not have an effect on marriage formation for men who *strongly disagreed* with the cultural belief regarding girls marrying before menarche, but has a positive effect for men who are moderate about this cultural belief, and has a strong negative effect for men who *strongly agreed* with it. It is likely that men who *strongly disagreed* with the cultural belief may be very idealistic about romantic love, which leaves little room for economic motivation. They tend to search for a long time to find an ideal spouse. Therefore, whether they had employment experience or not, these men have

much lower marriage rates. For men who were moderate about the cultural belief, the non-economic motivation does not play a prominent role here. Being economically attractive on the marriage market, those with employment are thus more likely to marry earlier. However, for men who *strongly agreed* with the cultural belief, non-economic motivation plays a prominent role. Those without employment experience may sense their disadvantage on the marriage market and search out wives quickly, unwilling to look too long for ideal spouses. In Figure 1.5, employment shows a positive effect on marriage formation for men. Further, the more important men's perceptions of the importance of marriage to their mothers, the stronger the effect of employment. The economic motivation and non-economic motivation thus work in the same direction to increase marriage formation for men.

Figure 1.6 shows a stronger effect of employment on marriage formation for men who had reached their parents' ideal marriage age than for those who had not. Again, for men who had reached the ideal marriage age and also had employment experience, the cultural pressure and being financially attractive to women looking for husbands accelerate these men's pace to marriage. Figure 1.7 shows that parental attitudes towards girls marrying before menarche modifies the effect of employment on men's marriage formation. For all men except those whose parents have the highest score on the attitude favoring girls marrying before menarche, employment is positively related to men's marriage formation. However, the more parents were in favor of girls marrying before menarche, the weaker the employment effects are. Furthermore, for men whose parents were extremely supportive of this cultural belief, there was not much difference between those with employment experience and those without. The picture here is the battle between the economic and non-economic motivations. On the one hand, employment is related to economic attractiveness on

the marriage market and makes men suitable for marriage sooner rather than later. On the other hand, sons may think that parents' ideas regarding girls marrying before menarche are outdated and irrelevant. Employment thus provides them economic leverage and autonomy to postpone marriage to some degree. Further, for men whose parents were extremely supportive of the cultural belief, employment does not show much effect. It is likely that the non-economic motivation with respect to parents' pressure is so prominent that economic motivation does not have much room to play a role. In Figure 1.8, we can see an interaction between years of education and the parental attitudes towards girls marrying before menarche. In general, education is positively associated with men's marriage formation. However, the more parents supported this cultural belief, the higher the marriage rates for individuals at all levels of education. Here, the non-economic and economic motivations work the same direction to increase marriage rates for all.

DISCUSSION

Employment has no direct effect on marriage formation for women but has positive effects for men. School enrollment is negatively associated with marriage formation for both men and women. Educational attainment is positively associated with marriage formation for women but negative for men. However, the interaction of educational attainment with parents' attitudes regarding girls marrying before menarche shows a positive effect for men. In general, economic resources may increase individuals' attractiveness on the marriage market, and thus facilitate marriage formation. However, it is also likely that they can buy

economic independence for women and provide leverage against cultural or familial pressure to marry early for both men and women.

Various ideational measures, including respondents' attitudes, their subjective norms, and their parents' attitudes are shown to affect marriage formation for both men and women. The general picture is that if individuals are more or less pro-marriage or feel pro-marriage pressure – for example, they strongly agree that girls should marry before menstruation or that their getting married soon is very important to their mothers – that individual would be more likely to marry sooner than others. Parents' promarriage attitudes regarding marriage also help individuals to enter marriage sooner. The implication is that ideational factors are contextual: individuals' decision-making regarding marriage formation is affected by significant others and likely by social norms in the context where they live. Thereby, in the setting of Nepal and other similar social contexts, to examine family behaviors, it is important to consider not only family socioeconomic background, but also parents' attitudes and relevant social norms. The challenge is to identify what specific ideational factors and relevant social contexts are.

However, it is important to be aware of the potential endogeneity issue regarding the ideal age of marriage. For example, remaining single for long time can change young person's ideal age of marriage. Yet, I do not have longitudinal measures to sort out the potential entangled relationship. It is thus important to keep in mind to interpret this relationship between ideal marriage age and timing of marriage as association rather than causation.

Furthermore, interactions between certain economic and ideational factors suggest a complicated mechanism concerning the economic and non-economic motivations underlying

marriage formation processes. For women, economic factors can both increase marriage hazards and help buy economic independence to avoid early marriage, dependent on how strong non-economic motivations (cultural, social norm and familial pressure) are. When experiencing extreme pressure from culture and social norms, economic motivations tend to be secondary to non-economic motivations. For men, driven by non-economic motivations such as cultural pressure, economic factors tend to be positively associated with marriage formation and usually have stronger effects. However, with extreme cultural pressure, economic factors can lose effect. Furthermore, under extreme pressure from parents, men also try to use economic leverage to postpone marriage formation. It is worth noting that non-economic motivations may not result in a real marriage without a good amount of economic resources, such as income from employment. This has great implications for relatively low marriage rates among socioeconomically disadvantaged groups in Western settings such as in the United States.

Education is a bit more complicated as an economic measure. It can mean that individuals have two attractive traits on the marriage market. First, education is closely related to potential jobs and income. Second, education is highly valued, and educated people are highly respected in the Hindu culture (Olivelle, 1999). Both traits can be positive factors in the rational part of the interactive approach. Other research indicates that educated people may think differently and tend to postpone marriage (Caldwell, 1982; Martin, 1995). This research does not seem to support the latter case. Thereby, to be precise, education should be partially interpreted as a socioeconomic measure. Furthermore, the first round of CVFS does not provide a complete to-date history of education. As I discussed earlier that it is likely women were close to completing education while a significant number of men had not

completed their education yet. Therefore, special caution is needed when interpreting effects of educational attainment, especially for men.

CONCLUSION

This paper contributes to the literature by specifically theorizing and then testing how the influences of socioeconomic and ideational factors on the timing of marriage interact with one another. It extends the current understanding of the integration of economic and ideational approaches in studies of marriage timing and addresses critical gaps concerning the interactive dynamics of economics and culture in family studies and social demography. It has significant theoretical implications for the further exploration of the dynamics of economic and non-economic motivations underlying family formation behaviors and beyond.

For future research, it is important to incorporate richer and more informative economic measures, such as income, complete employment and education history, and other relevant financial measures. This research uses education as an indicator of socioeconomic attainment. Past research suggests that it can also function as an ideational force (Bongaarts & Watkins, 1996; Caldwell, 1982; Martin, 1995). In-depth interviews to solicit descriptions and emergent patterns of marital processes will help to disentangle the economic and ideational components of education in the complicated process of marriage formation. The use of a mixed methods approach will help further understand the dynamics of how education affects marriage formation.

Furthermore, this interactive approach regarding the influences of socioeconomic factors and ideational factors on marriage formation is empirically supported in the Chitwan

Valley. The implication is, the economic-versus-non-economic motivation interaction approach can be a useful framework to investigate family formation behaviors in various cultural settings and social contexts in both non-Western and Western societies.

NOTES

- 1. In the paper, the variable *work* (employment) includes in-home businesses. In models not reported here, I also estimated the effects of *nonfamily work*, for which I excluded in-home businesses. The results show that the effect of *work* (including in-home businesses) is stronger and more significant on family formation, compared to *nonfamily work* (excluding in-home businesses). It suggests that individuals with more income and other economic resources are more likely to marry sooner. Therefore, using this measure can better detect economic incentives underlying marriage formation behaviors.
- 2. Limited by the data, I don't have a complete history of education. It is possible that many women had either completed or was close to completing their educations by 1996, while a significant number of men were far from completing their educations by 1996. One strategy that I adopted in the paper is to control for school enrollment in 1996. In models not reported here, I also estimated effects for school enrollment at age 10 and whether the respondent had any education at all on marriage formation for men. Both variables have negative effects on marriage formation. Signification interactions include those of school enrollment with attitude regarding girls marrying before menarche and importance of mother's preference of marriage timing, and those of ever having education with attitude regarding girls marrying before menarche, importance of mother's preference of marriage timing and parental attitudes regarding girls marrying before menarche. Results are available from the author upon request.
- 3. By lagging the migration status for a month, I avoided the competing risks of marriage and migration, considering that some people move out or move in to a new household at the time of marriage, especially women. An alternative approach would be to compare each month's residence to a previous month. During my fieldwork in Nepal, I found that people migrated to Southeast Asian and Middle Eastern countries to work. After they had earned enough money, they returned and married. The dynamics of migration with regard to marriage are as follows: When they are away, they are not married; when they return, they marry. The purpose of controlling for migration is not to monitor whether respondents are physically away but to examine the influences of their migration experience. This dynamic way of measuring migration can capture both moving out, moving back, and moving to different places. It thus represents the history and direction of migration. There are a small number of people who migrated out and never came back. These people are then right censored. Unfortunately, the nature of the variable coding does not allow me to experiment with this strategy.
- 4. The observation time is 126 months. So not each of the 12 months in the year is repeated the same number of times.
- 5. I first used Proc Glimmix with SAS to estimate multilevel hazard models to address the inflated standard error problem (Raudenbush & Bryk, 2002; Axinn & Yabiku, 2001; Barber et al., 2000; Yabiku, 2004, 2005 & 2006). The model allows for a random intercept to vary by neighborhood. However, the models did not converge. A possible reason is that the

correlation among neighborhoods was not substantial. I then used the SAS Proc Genmod to estimate the discrete-time hazard model and correct inflated standard errors at the same time. The results confirmed my original speculation that the correlation among neighborhoods was small, with the correlation coefficients constantly less than .002 for all models I estimate.

6. The term 'marriage market' which I used in the paper loosely follow Gary Becker and V.K. Oppenheimer's idea regarding marriage formation as the process of searching potential spouse, either following the foreign trade model (Gary S. Becker) or the job search model (Valerie Kincade Oppenheimer). Therefore, in this dissertation, 'marriage market' is understood as the pool of men and women who are potential candidates for those who are actively looking for a mate. It is termed t for the sake of convenience of usage and the marriage market theories are not the focused concern here.

Table 1.1. Descriptive Statistics, CVFS (N = 389 women, N = 420 men)

	Women			Men		
	Mean/ Frequency	SD	Range	Mean/ Frequency	SD	Range
Married between 1996 and 2007 Socioeconomic Attainment	0.88	0.33	0-1	0.72	0.45	0-1
Ever had work before 1996 Highest year of schooling in	0.5	0.5	0-1	0.51	0.5	0-1
1996	6.61	2.88	0-14	7.66	2.53	0-14
Enrolled in school in 1996 Individual Attitudes and Subjecti	0.72 ive Norm	0.45	0-1	0.69	0.46	0-1
Reached ideal marriage age ^a (lagged one month)	0.52	0.5		0.43	0.5	0-1
Marry before menstruation						
Strongly disagree	10.54%			5.95%		
Disagree	71.72%			72.14%		
Agree	10.03%			14.52%		
Strongly agree (ref)	7.71%			7.38%		
Important to mother to get marrie	ed					
Not important at all	56.54%			47.46%		
Somewhat important	34.03%			37.77%		
Very important (ref)	9.42%			14.77%		
Parental Attitudes Reached ideal marriage age ^a	0.6	0.49	0-1	0.31	0.46	0-1
(lagged one month)						
Marry before menstruation Control Variables	2.53	0.67	1.5-4	2.55	0.71	1-4
Time						
Age	16.79	1.54	15-20	17.1	1.56	15-20
Caste/Ethnicity						
High-caste Hindu (ref)	56.81%			53.33%		
Low-caste Hindu	7.46%			10.48%		
Newar	9.77%			5.95%		
Hill Tibeto-Burmese	10.80%			13.81%		
Terai Tibeto-Burmese	14.91%			15.71%		
Others	0.26%			0.71%		
Ever migrated by 1996	0.27	0.44	0-1	0.31	0.46	0-1
Migrated after 1996 ^a (lagged one month)	0.88	0.32	0-1	0.59	0.49	0-1

Marriage month						
1	3.60%			4.05%		
2	10.28%			9.76%		
3	17.74%			12.14%		
4	4.37%			4.52%		
5	18.51%			13.33%		
6	10.03%			5.24%		
7	21.34%			33.57%		
8	1.03%			3.10%		
9	1.03%			2.14%		
10	1.80%			2.38%		
11	2.83%			2.38%		
12 (ref)	7.46%			7.38%		
Family Socioeconomic Status						
Family economic resources						
Component 1	0.38	1.02	-5.28	0.36	1.1	-5.89
Component 2	0.14	0.98	-4.92	0.18	1.07	-4.99
Component 3	0.26	1.16	-8.57	0.26	1.21	-8.57
Father ever worked	0.48	0.5	0-1	0.61	0.49	0-1
Father's highest year of schooling	3.98	4.43	0-16	4.12	4.48	0-16
Mother's number of children	5.31	1.94	1-12	4.82	2.13	0-15

^a timing-varying variable (the descriptive statistics are from the last month of observation)

Table 1.2. Effects of Socioeconomic and Individual and Parental Ideational Factors on Timing of Marriage for Women, CVFS $(N=389)^a$

	1	2	3	4	5	6	7	8
Socioeconomic	1			-т		<u> </u>		
Attainment								
Ever had work	1.13							1.05
Highest year of	1.13							1.03
schooling		1.06*						1.06+
Enrolled in		1.00						1100
school in 1996		0.67*						0.73+
Individual Attitud	les and Sub							
Norm		<i>y</i>						
Reached ideal								
marriage age b			1.17					1.25
Marry before mer	nstruation	(ref = Stro						
agree)		`						
Strongly								
disagree				0.66+				0.64+
Disagree				0.58**				0.57**
Agree				0.45**				0.45*
Important to moth	ner to get n	narried (ref	=Verv im	portant)				
Not	6		,	r · · · · · · · · · · · · · · · · · · ·				
important at all					1.09			1.2
Somewhat								
important					1.19			1.29
Parental								
Attitudes								
Reached ideal								
marriage age b						0.86		0.84
Marry before								
menstruation							0.84+	0.85
Control								
Variables								
Time	1.01***	1.01***	1.01***	1.01***	1.01***	1.01**	1.01***	1.01***
Age	1.06	1.01	1.07	1.05	1.07	1.06	1.08 +	1.03
Caste (ref = High	-caste							
Hindu)								
Low-caste								
Hindu	0.97	0.99	0.97	0.97	0.98	1.07	1.08	1.16
Newar	0.88	0.91	0.89	0.88	0.93	0.82	0.82	0.83
Hill Tibeto-								
Burmese	1.27	1.25	1.3	1.14	1.25	1.28	1.32	1.19
Terai								
Tibeto-Burmese	0.53*	0.60 +	0.56*	0.54*	0.55*	0.50*	0.5	0.57 +
Others								
Ever migrated	1.70*	1.68*	1.67*	1.79**	1.64*	1.58*	1.60*	1.65*
	2.,, 0	2.50	2.07	2/	2.01	1.00	2.50	1.00

by 1996								
Migrated after								
1996 ^b	1.08	1.15	1.11	1.09	1.14	1.19	1.2	1.29
Family socioecon	omic							
status								
Family								
economic								
resources								
Component								
1	1.04	1.03	1.03	1.04	1.02	1.01	1.01	1.02
Component								
2	0.85 +	0.82*	0.85 +	0.85 +	0.85+	0.84+	0.84+	0.82 +
Component								
3	0.95	0.94	0.94	0.96	0.93	0.92	0.93	0.93
Father ever								
worked	0.97	1.01	0.98	0.97	0.99	0.89	0.9	0.89
Father's highest	0.98	0.97 +	0.97	0.97 +	0.98	0.98	0.98	0.97
year of								
schooling								
Mother's	1.07	1.07	1.07	1.07	1.08	1.08	1.08	1.07
number of								
children								

^a for sake of saving space, the dummy variables month are not shown ^b time-varying variable

⁺p<.1 *p<.05 **p<.01 ***p<.001 (one tailed tests, except two-tailed tests for controls)

Table 1.3. Effects of Socioeconomic and Individual and Parental Ideational Factors on Timing of Marriage for Men, CVFS (N = 420)^a

	1_	2	3	4	5	6	7	8
Socioeconomic Attainment								
Ever had work	1.55**							1.51**
Highest year of schooling		0.94*						0.93*
Enrolled in school in 1996 Individual Attitudes and Subjective Norm		0.74*						0.76+
Reached ideal marriage age ^b			1.03					1.26+
Marry before menstruation (ref = Strongly agree)								
Strongly disagree				0.36**				0.53*
Disagree				0.71+				0.85
Agree				0.72				0.84
Important to mother to get married (ref = Very important)								
Not important at all					0.56**			0.55**
Somewhat important					0.75 +			0.73+
Parental Attitudes								
Reached ideal marriage age ^b						0.73*		0.72*
Marry before menstruation							1.04	1.01
Control Variables								
Time	1.02**	1.02***	1.02***	1.02***	1.02***	1.02***	1.02***	1.02***
Age	1.31***	1.35***	1.34***	1.34***	1.33***	1.31***	1.35***	1.31***
Caste (ref = High-caste Hindu)								
Low-caste Hindu	1.17	1.02	1.13	1.13	1.09	1.1	1.14	1.02
Newar	0.78	0.72	0.76	0.72	0.73	0.76	0.77	0.68
Hill Tibeto-Burmese	1.41+	1.33	1.37	1.38	1.48+	1.4	1.43+	1.41
Terai Tibeto-Burmese	1.3	1.21	1.3	1.36	1.42	1.23	1.31	1.26
Others	2.40*	1.90+	2.05	1.93	1.72	1.93	2.06	1.42
Ever migrated by 1996	0.93	0.89	0.88	0.9	0.86	0.88	0.88	0.97

Migrated after 1996 ^b	2.02***	1.91***	1.95**	1.90***	1.99***	2.01***	1.95***	1.99***
Family socioeconomic status								
Family economic resources								
Component 1	1.03	1.03	1	1.01	1.01	1.02	1.03	1.05
Component 2	0.92	0.97	0.91	0.93	0.98	0.94	0.93	1.09
Component 3	1.07	1.08	1.05	1.03	1.04	1.05	1.05	1.05
Father ever worked	0.92	0.97	0.93	1	0.99	0.94	0.95	1
Father's highest year of schooling	0.94***	0.93***	0.93**	0.92***	0.92***	0.92***	0.92***	0.93***
Mother's number of children	0.95	0.95	0.95	0.96	0.94+	0.93+	0.93+	0.92*

^a for sake of saving space, the dummy variables month are not shown

^b time-varying variable +p<.1 *p<.05 **p<.01 ***p<.001 (one tailed tests, except two-tailed tests for controls)

 $Table \ 1.4. \ Interaction \ Effects \ of \ Socioeconomic \ and \ Ideational \ Factors \ on \ Timing \ of \ Marriage, \ CVFS(N=389 \ women, \ N=420 \ men)^a$

	Wome	n		Men				
	1	2	3	4	5	6	7	8
Socioeconomic Attainment								
	0.02	0.60		0.62	2.61*	1.29	3.27	
Ever had work	0.83	0.62+	1.10*	0.62	*	+	~	
Highest year of schooling			*					1.05
riighest year of senooning								0.70
Enrolled in school in 1996			0.66*					*
Individual Attitudes and Subjective Norm								
Reached ideal marriage age b	0.91		2.07*					
Marry before menstruation (ref = Strongly agree)								
				0.25*				
Strongly disagree		0.56+		*				
Discourse		0.37**		0.38*				
Disagree		0.28**						
Agree		*		0.35*				
Important to mother to get married (ref = Very important)				*****				
Not important at all					0.78			
Somewhat important					1.02			
Interaction between socioeconomic attainment and individual attitudes and								
subjective norm								
·	1.68							
Ever had work*Reached ideal marriage age	*							
Ever had work*Marry before menstruation								
Had work*Strongly disagree		1.02		1.6				
Had work*Disagree		1.93*		2.51*				
Had work*Agree		2.03+		3.21*				
Highest year of schooling *Reached ideal marriage age			0.92*					
Ever had work*Important to mother to get married								
Had work*Not important at all					0.51*			
Had work*Somewhat important					0.56 +			

Parental Attitudes Reached ideal marriage age ^b	0.53	1.22	
Marry before menstruation Interaction between socioeconomic attainment and parental attitudes		+	1.66
Ever had work*Reached ideal marriage age	1.58		
Ever had work*Marry before menstruation		0.74	
Highest year of schooling*Marry before menstruation			0.94

^a Control variables are not reported here
^b time-varying variable
+p<.1 *p<.05 **p<.01 ***p<.001 (one tailed tests, except two-tailed tests for controls)

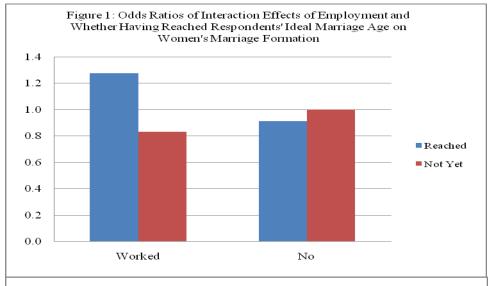


Figure 2: Odds Ratios of Interaction Effects of Employment and Attitude regarding Girls Marrying before Menarche on Women's

Marriage Formation

Strongly Disagree

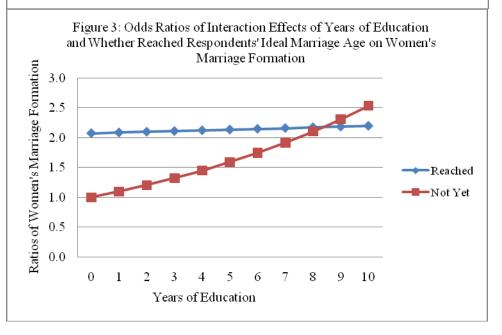
O.6

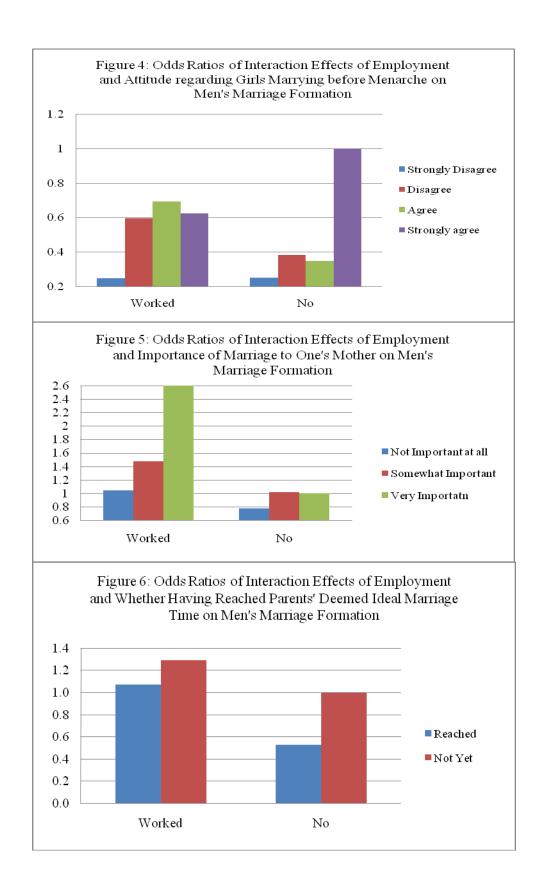
O.4

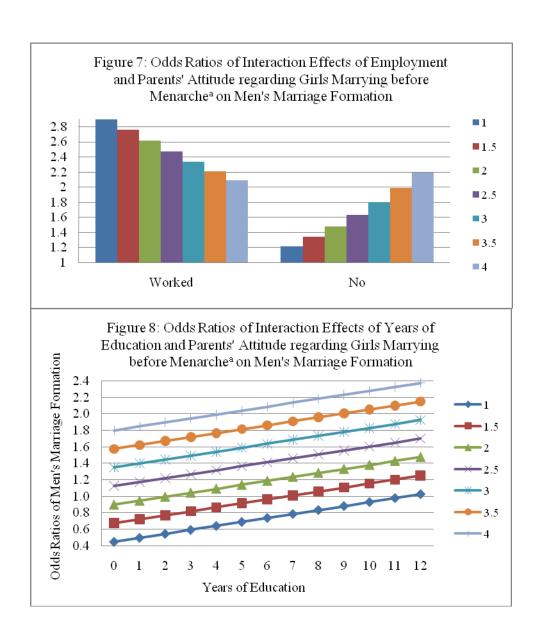
O.2

Worked

No







CHAPTER 2

JUGGLE MARRIAGE AND SCHOOLING? WOMEN IN THE CONTEXT OF NEPAL

INTRODUCTION

Education is a key factor associated with family formation, with women's education attracting special attention among social scientists. Much research is involved in the debate about whether educated women are forgoing marriage due to economic independence (Becker, 1991), postponing marriage due to a longer search time (Oppenheimer, 1988), or even more attractive in the marriage market due to extra income to pool for the couple (Cherlin, 2001). After Goldstein and Kenney's (2001) influential paper on this issue, research has increasingly reported that educated women tend to have higher marriage rates in many industrial countries (Bloom & Bennett, 1990; Goldscheider & Waite, 1986; Goldstein & Kenney, 2001; Lichter et al., 1992; Oppenheimer, 1994). Yet on the flip side of this field of research, scholars focus on how early marriage or early childbearing can interrupt women's education, affect their educational attainment and then negatively influence the wellbeing of both women and their children in the long run (Hango & Bourdais, 2007; Hofferth, Reid & Mott, 2001).

Little research directly addresses whether women combine marriage and student roles and how they do so, although research does examine how educated women postpone marriage or early marriage negatively affect women's educational attainment in the long run as discussed above. The underlying assumption is that the family and student roles are in

conflict because both are highly demanding in terms of time and financial resources (Blossfeld & Huinink 1991; Thornton, Axinn & Teachman, 1995; Raymo, 2003). This aforementioned conversation mostly occurs in and applies to Western industrialized societies, and it may be true that it is extremely difficult for women to compromise between family and student roles in these societies. But do women negotiate between student and family roles "in specific cultural and social contexts" of rapid socioeconomic development (Thornton & Fricke, 1987)?

My investigating women's combining their student and family roles in the cultural context of Nepal is motivated by the following theoretical and empirical points. First, modernization theory predicts the convergence of family behaviors around the world in the course of fast industrialization and urbanization (Goode, 1963). Thornton (2005) analyzes that the diffusion of ideational forces through globalization speeds up the so-predicted convergence towards westernization in the name of "modernization." However, he notes that it is dangerous to interpret history "sideways" by transposing the history of Western societies to contemporary developing societies, which entirely neglects the autonomy and power of historic culture of the local societies. It is likely that in a transitional society like Nepal, women may have different patterns of family behaviors and ways of dealing with marriage and student role conflicts, compared to their Western counterparts.

Second, research indicates that when the breadwinner-homemaker family mode was popular in the United States, the independence hypothesis that highly educated women with good income prospects are less likely to marry or give birth to more children was relevant (Becker, 1991). However, as dual-income families have become the norm, women's education and economic sources contribute to marriage (Cherlin, 2000; Oppenheimer, 1988).

Accordingly, women in transitional societies, especially societies where gender ideology and gendered household labor division are still common, the independence hypothesis still holds (Martin-Garcia & Baizan, 2006). However, the danger is to ignore the "specific cultural and social contexts" of these societies (Thornton & Fricke, 1987). To avoid the pitfall of turning history "sideways", I have decided to focus on how women juggle family and student roles in the context of Nepal, rather than looking at how they choose one at the cost of the other following the conventional model, the independence hypothesis, tested numerously in Western societies.

Third, education empowers women to improve social equality for both themselves and their daughters. Further, although education empowering women has been much discussed in the public dimension, it is less investigated inside the private family (Murphy-Grahm, 2010). Malik and Courtney (2011) find that participation in higher education empowers Pakistani women through economic independence and raising status inside and outside the family. Mother's education can influence daughter's education (Afridi, 2010), timing of marriage and fertility (Bate et al., 2007; Maitra, 2004). Ahmed, Creanga, Gillespie and Tsui's (2010) 31 countries study shows that education is positively associated with using maternal health service and this can help to improve maternal survival which affects both women and their children. Another study reports that education improves both women and their children's HIV/AIDs infection (Scanlan, 2010). Education is thus important for both women's and their children's life course trajectories and has important implications for public health and public policy. Thus, understanding whether women continue education after marriage and what factors contribute is theoretically, culturally and practically significant.

This research asks whether women continue or ever go back to school after their marriage in the context of Nepal and further examines what characteristics of these women shape their post-marriage education continuation, including their family background, education level and whether their marriage is love, arranged or combined marriage. First, I introduce the geographic and cultural setting of this study, Chitwan Valley, Nepal. Second, I draw on data from semi-structured interviews I conducted with recently married men and women in the Chitwan Valley of Nepal. Building on the interviews and existing literature, I hence develop contextually relevant hypotheses regarding post-marriage education continuation among Nepalese women. Third, I employ survey data from Ideational Influences on Marriage and Fertility Behaviors (IIMFB) collected in Chitwan Valley, Nepal to test the above hypotheses. Finally, I discuss limitations and contributions of my study in the conclusion section.

My findings show that a significant number of women who had not completed their education continue it after marriage, and women whose parents were more educated have higher rates to continue it. Furthermore, the more education women have before marriage, the more likely they will continue it after marriage. Women who and their parents were both involved in the marriage formation decision are more likely to continue their education, compared to those had high autonomy in making their decision regarding marriage. For women whose marriages were mostly arranged by the parents, they are more likely to continue their education when they themselves had no or moderate education, compared to their counterparts who had high autonomy in forming their own marriage. However, the relationship reverses for those with university education.

SETTING

The Chitwan Valley in Nepal

An in-land country in South Asia, Nepal is located between the Tibetan Plateau in China and the north plains of India, including the Mountain, Hill and Terai regions (Choe, Thapa & Mishra, 2004). The Chitwan Valley is located in the Terai region, about 100 miles southwest to Kathmandu and bordering India to the north. It follows a patrilineal system and has a heavy Hindu influence. Culturally, it is close to northern India, western Bangladesh and eastern Pakistan (Yabiku, 2005). Until the 1950s, the valley was still covered by forests and jungles with a small population of indigenous people. The Nepalese government at the time, with the help of the US government, eradicated malaria, cleaned the jungles, and turned this jungle area to farmland (Axinn & Yabiku, 2001; Shivakati et al., 1999). The Chitwan Valley has thus become an economic hub between Nepal and India (Axinn & Yabiku, 2001; Ghimire, Axinn, Yabiku & Thornton, 2006).

Rapid social transformations occurred that changed the organization of people's lives; services previously provided within the family (e.g., transportation, employment, and health care) began to be outsourced to nonfamily institutions. Increased education and employment opportunities and exposure to mass media convey Western values regarding family behaviors and provide alternatives to marraige (Axinn & Yabiku, 2001; Yabiku, 2004, 2005 & 2006). In spite of striking social changes, the historical Nepalese family values and systems prevailed; marriage is universal and early marriage is normative and women marry even earlier. More than 98 percent men and women between the age of 30 and 34 years old were married, and the average age at first marriage in the Chitwan Valley was 17.6 years for

females and 21.9 for males between 1990 and 1996 (Yabiku, 2005). However, changes relevant to family behaviors were evident.

Parental authority lessened, and individuals gained increased autonomy and economic independence (Thornton & Fricke, 1987; Thornton & Lin, 1994). Barber (2001) finds that decision-making regarding marriage, previously controlled mostly by parents, is now shifting to a process that allows more individual control. However, because of a long history of religious and social norms encouraging arranged marriages, individuals are still willing to allow parents some control over the marriage process (Barber, 2004; Ghimire et al., 2006). The mixing of strong cultural influences and increased nonfamily opportunities thus makes Chitwan Valley an ideal setting to study how women juggle marriage and education in their daily life.

SEMI-STRUCTURED INTERVIEW METHODS AND DATA

Sample

I conducted semi-structured interviews in Chitwan Valley, Nepal with the help of a Nepalese assistant during 2008 and 2009 (Please see Appendix 2.1 in the end). The diversity of the study sample was obtained by recruiting participants with variance in age, gender, caste/ethnicity, and education. The research assistant and I recruited ten women and ten men who became married in around the past twelve months at the time of recruitment and were between the ages of 15 to 34 at the time of marriage. Half of the sample had education levels higher than high school completion. The sample is split equally across each of the following

caste/ethnicity groups: High Caste Hindu, Low Caste Hindu, Terai Tibeto-Burmese, Hill Tibeto-Burmese and Newar.

Semi-Structured Interview

The semi-structured interviews started with a short questionnaire on general demographic information. The interviews were usually conducted at respondents' private homes. Before the interview started, the research assistant obtained formal oral consent from each respondent. The interviews were completely voluntary and lasted about one hour. All interviews were done in Nepali and were conducted by a native Nepali-speaking interviewer. I observed and recorded the interviews, answered questions, and addressed occasional problems during the interviews. The semi-structured interviews asked questions about marriage processes, such as how the participant met his/her spouse, how the decision regarding marriage was made, particularly when faced with different opinions from family, friends and neighbors, what kind of spouse the participant looked for, what personal traits/attainments made him/her a potentially attractive partner, how many children the participant and his/her spouse wanted, and whether the couple used contraceptives.

After all interviews were completed, the audio files were transcribed into Nepali transcripts. Identifiers such as names and places were removed from the transcripts. The transcripts were then translated to English, typed and saved.

Analysis

I employed ATLAS.ti to organize my analysis of the interview transcripts. First, I went over the transcripts multiple times looking for repeated themes and concepts. Second, I

classified the topics and patterns most frequently mentioned as specific codes and return to each transcript systematically, exploring for every code.

INTERVIEWS. THEORY AND HYPOTHESES

To Be Married or to Be Educated? Or Is There a Third Route?

Education is highly valued in the context of Nepal. Almost all my participants suggested that ideally, unmarried young people should complete their education first and then marry. However, in reality, about half of my participants were either still in school after marriage, supported their spouse to go to school, or showed strong interest in going back to school. Kamala, a college student, desired to continue her education after marriage. She was supported by her husband's family. She described,

I had such a feeling from the beginning. It isn't necessary to discontinue the studies after marriage, is it?

I had some (education) before marriage. I wanted to continue education and be independent.

Well, I want to continue my studies even after my marriage. And the other family members also support my decision about continuing school. My husband and inlaws have allowed me to continue my studies. Anyway, there is no restriction. I'm free to study.

Kamala emphasized that there was "no restriction" from her parents-in-law and that she was "free to study." This tells us that due to the patrilocal tradition of living with the husband's family, the authority and resources that parents-in-law have, is essential for Kamala's educational aspiration to be realized. Another respondent, Sita, lived with her husband and two of his older sisters who had never married. Her work place was far from home. Therefore, during working time, she stayed with her parents. In the weekends, she

came back home to her husband and his sisters. She realized the conflict between student and family roles and suggested that family support was indispensable,

I have thought if the situation becomes favorable (I will go back to school). But the situation before marriage and after marriage is different. Before marriage I was free in my parents' home but now I have to fulfill my duties properly. I should do something for my family.

If I have time and support for it I am very much interested (in completing my education).

The best thing is to get married only after finishing school. If there is no choice, they should be allowed to continue their studies after marriage and the family should support them.

She mentioned that being single meant being free to do one's will in her parents' home and being married meant that she had duties and responsibilities to the husband's family. Although she had a very demanding commute for her job, she still aspired to continue her education one day. However, Sita's situation was unlike Kamala's, in that, both of Sita's in-laws were deceased and she did not have much familial support, financially and otherwise. This likely explains why Sita cannot continue her education after marriage.

Even as the Nepali society transits rapidly from an agricultural to an industrial economy, marriage is still universal and relatively early, with women marrying much earlier than men, and premarital sex is still not socially accepted, especially for women (Choe, Thapa & Mishra, 2004; Yabiku, 2005). For example, Caltabiano and Castiglioni (2008) report that almost 70 percent of wives reported that they were at least three years younger than their husbands.

It is common in Nepal, as in many transitional societies, that historic culture and local customs continue to have great influence on family behaviors. For example, the historic consanguineous marriage is still popular in many Middle Eastern and South Asian countries

when urbanization and industrialization is under way in fast pace (Abbasi-Shavazi, Mcdonald & Hosseini-Chavoshi, 2008). In spite of the rapid socio-economic development in Indonesia, marriage age and post-marriage residence are still regulated by the "adat", the local, ethnic customs and norms, against the strong forces of modernization (Buttenheim & Nobles, 2009). Hirschman and Teerawichitchainan (2003) analyzed that decline in divorce rates in three Southeast Asian countries, in the opposite direction of what modernization and convergence theory predicts, is the result of the interaction between historic culture and modernization.

Moreover, many studies in other transitional societies going through rapid socioeconomic development report similar patterns. The influences of conventional values on marriage patterns have strengthened for Egyptian women (Amin & Al-Bassusi, 2004); in spite of Spanish and Portuguese women's great improvement in education and employment in the public sphere, conventional gender ideology dominates gender relationship inside family (Dominguez-Folgueras & Castro-Martin, 2008); in Iran, consanguineous marriage is still popular though facing challenges from modernization (Abbasi-Shavazi, Mcdonald & Hosseini-Chavoshi, 2008); and under the influence of local custom and parental authority, arranged and cousin marriage prevail in Turkey (Ertem & Kocturk, 2008).

In the face of Nepal's rapid expansion of mass education and universal and early marriage, could there be a third route other than postponing marriage or having an early marriage while forgoing further education? As Thornton and colleagues (Thornton, Axinn & Teachman, 1995) asserted, family and student roles are in conflict because both are highly demanding in terms of time and financial resources. Women may not have enough financial support to continue school after marriage and also may not have enough time to attend school when household duties are more demanding compared to when being single.

However, the custom of living with the husband's family after marriage in Nepal as well as other South Asian and Southeast Asian countries (Caldwell, 1982; Caldwell, Reddy & Caldwell, 1988), means likely financial support and housework help, such as cooking, cleaning, and childcare from the husband's parents and other family members. Schuler and Rottach's 2010 study in another South Asian country, Bangladesh, confirms that mothers-in-law can exert their authority and share housework to help their daughters-in-law to continue education or take nonfamily employment. This patrilocal arrangement thus makes post-marriage education feasible for young women, like these Nepalese women, solving the dilemma many Western women face regarding student and family role conflict. It deserves note there that this study is not interested in testing variance of the patrilocal living arrangement, which is thus treated as the cultural context. Rather, I am more interested in the possibility of whether women continue their education after marriage. Hence, I arrive at my first hypothesis,

Hypothesis I: If women have not completed their education before getting married, they are more likely to continue their education after marriage, rather than abruptly ending their education.

It is all about the Family

As Nirmala, a female, confessed in her interview, people generally look at education and family background when seeking a spouse. Family background, including family socioeconomic status and social reputation, especially parental education, is carefully evaluated when it comes to the matter of marriage. Family background means the social status of a family and prestige among the neighbors. My participants believed in qualities of children that come from families with good reputation.

Ramesh and Narayan, both males, thought that family background can be an important criterion when looking for a spouse. Narayan further explained that good family background is conducive for the children to be educated and thus to preserve culture,

If parents and guardians are educated their children also become educated. They walk on the path of their guardians. They follow tradition and culture of their parents.

Gopal, male, who had an arranged marriage recalled that when the girl's family visited to talk about marriage, "They were only curious about our family members and family background." Hari, another male, associated family background to social prestige and was of the view that a daughter would be judged according to her family reputation. As he said,

Yes, family background also should be good, reputed. If the family members are educated then they can be popular because of their works and good manner; if the family members are educated then everyone knows them and it is taken on their family background. The main thing is if the guardians are educated then they always want to provide education to their children and so all the members can be educated that way, and as a result the family will be known as a good, reputed family in the neighborhood. And so the children walk in the path of their guardians.

In my opinion, the most important thing is the family background. It is essential to know how the family members are and what prestige they have in the society. It is very important to know whether or not the bride was raised in a good respectable family. Therefore familial upbringing is the most important factor in determining a capable and desirable marriage partner.

My female participants seem to agree with their male counterparts in the important role of spouse's family background, especially parental education. Nirmala relates parental education to a meaningful life,

The most important is the education of the parents. If the parents are educated, all of the family would become educated. Education plays a vital role in making life meaningful.

Both Kamala and Sunita considered parents' education to be the most important thing. Whereas, Kamala deemed that educated parents can give fertility suggestions. Sunita underlined educated parents to be understanding and able to keep up with changing times. She went on,

Life is easier if your family is educated. Educated parents are understanding. They know what is right or wrong. Uneducated parents talk about traditions. It's not good. The time has changed.

Family background is a very important factor considered in my participants' marriage formation process. Correspondently, a myriad of studies discuss the importance of parental socioeconomic resources on offspring's marriage timing and educational attainment (Axinn & Thornton, 1992; South, 2001). In their 1992 classic paper, Axinn and Thornton identified complicated mechanisms that relate parental socioeconomic resources and their preference to their children's education and timing of marriage. They posited that parental economic resources and educational achievement can help to socialize their offspring's aspiration of educational goal and thus affect their marriage timing. Further, parents are able to utilize their financial resources to influence children's marriage age according to their preference of ideal marriage age for their children.

In the context of the United States, Axinn and Thornton (1992) found a delaying effect of parental socioeconomic status, including financial resources and educational attainment, on their offspring's marriage. However, in the context of Nepal, the outcome could be different when it comes to continuing education after marriage or compromising between marriage and education. With universal and early marriage in Nepal, especially for women, Nepalese families with high socioeconomic status may prefer their daughters both marrying early and achieving a good level of education. Another important cultural factor to

consider here is that premarital sex is a taboo for women. To attain their preference, and also to protect their daughter's honor before marriage, parents may utilize their socio-cultural authority and financial resources to arrange a marriage for their daughter and also help her to continue education after marriage.

Because people have trust in those with a good family background, especially those whose parents are educated, married women from good family backgrounds also tend to be well educated, usually are well treated by others, and may also have high self-esteem. They are likely respected and have relatively high status in the husband's family. In addition, their parents are also respected by the parents-in-law. The parents' endorsing their daughter's education is also likely to be supported by the daughter's parents-in-law. Thus, I arrive at my second hypothesis with a focus on parental education,

Hypothesis II: Women whose parents are well educated are more likely to continue their schooling after marriage, compared to their counterparts with less educated parents. *Education is Everything*

In my participants' view, being educated means one is competent, able to find a well paid job, is understanding, competent in handling family relations, respected by neighbors, and able to educate others. For example, Hari linked education to good jobs and empowerment in life and pointed out that neighbors and the husband's family judge the woman by her education. As he articulated,

To summarize it in a sentence, an educated person is successful. Their married life can be easier as they have a good qualification for jobs and on the other hand they have a good knowledge of what is right and what is wrong.

Education is not just important for marriage but for everything. We get all kinds of knowledge from education. Like, how to live, when to marry, whom to marry, how many children to have, how long the gap should be between two children.

After marriage, when a girl goes to her husband's home, she should be careful about various things. People in the community talk about the new arrival in the community, about how she is, how much she has studied.

Ram and Ramesh, both males, believed education as essential for the couple to have good, mutual understanding. Gopal, another male, stressed the role of education in helping the wife to gain status and establish a good relationship in the husband's family. As he stated,

If the daughter-in-law is educated then she can give suggestions to her mother-inlaw. You know, the parents especially mothers-in-law are not educated as there were no education facilities for them during their time. So if the daughter-in-law is educated she can convince her mother-in-law and make her aware of various kinds of issues. She can win their heart by being a good knowledgeable daughterin-law.

Now that we understand the importance of a wife's education from the husband's perspective, let's turn to investigate what the wife has to say. Maya associated women's education to attractive straits in the marriage market. She advanced to associate it to good jobs and even economic independence,

Nowadays it (education) is the thing. Men look for educated women for marriage partners. Education is everything now. Uneducated person is nothing. I too believe that it's true because everyone should have education, every female. If they are educated, they also can have job in offices. If in case, their husbands left them they could work outside the house to support themselves.

Although Maya's confession sounds much "westernized" and concurs with the independence hypothesis in the academic field of family studies, the very same woman also claimed that, "We should depend only on our husband." It is striking to see how "westernization" and keeping to historic culture walk hand-in-hand in the transitional society of Nepal. Further, Kamala alleged that education helps the wife to instruct family members and thus become a good wife,

I think a good wife must be educated, so that she could educate other members of the family. She must be supportive and have good understanding. Education enables to get such qualities. Geeta (female) further described how one's education is judged by others in a comprehensive way,

Because one's education level is sought when looking for a potential spouse, you know. One's character is judged on the basis to his education. For that education is very important.

Education is an important factor linking to women's empowerment and correlated with women's autonomy (Afridi, 2010; Bradley & Khor 1993; Desai & Alva, 1998; Stacki & Monkman, 2003). Murphy-Graham (2010) argues that education has empowered Indian women in their households through changing values, improving the couple's relationship and by providing better economic prospect. Bates et al. (2004) reported that women's education is related to reducing violence in rural Bangladesh, which indicates that education increases women's autonomy and status.

Education can be connected to women's possibility of continuing school in the following ways. In the context of Nepal, women are married much earlier than men and education is highly valued for wives, which is related to both potential jobs with good income and status inside and outside family. Therefore, as education level increases, the opportunity cost of discontinuing education after marriage is relatively high. Further, married women with more education may have higher autonomy and also usually have higher status in the in-laws' family. As a result, they may be more likely to articulate their interest in continuing education, and their demand is also more likely to be supported by the husband's family. And so I reach my third hypothesis,

Hypothesis III: Highly educated women are more likely to continue their unfinished schooling after marriage, compared to their less educated counterparts.

Love, Arranged and Combined Marriage

As recently married men and women I interviewed narrated, young people either meet their future spouse by themselves or with help from their friends, fall in love, maybe elope, then inform the parents, come back to the husband's home, and the parents may or may not put *Tika* (a mixing of rice and red powder) on their daughter-in-law's forehead as an official recognition and acceptance of their marriage. This is how love marriage occurs, with no involvement from the parents at all. To some degree, this is a type of elopement and is more or less stigmatized.

In contrast, arranged marriage occurs through a different process. Family members or relatives help search for comparable young people, usually with an emphasis on education and family background, and then the families of the two young people come to an agreement through information exchange and possible negotiation. After that, they inform the young people and leave them for the final decision. In extreme cases, the young people are forced to accept their parents' decision in a purely arranged marriage. Usually, young people have one to two weeks to make their decision. Combined marriage is a category between love and arranged marriage. Both parents or other family members and the young people themselves participate in the marriage formation process and make a joint decision in the end. This is also a popular type of marriage and involves a mix of parents' and offspring's agency.

Geeta was a college student at the time of the interview. She had an arranged marriage. She referred the process of finding a spouse in an arranged marriage as a "shopping program." She described the process of an arranged marriage, and how she had to get married at short notice. She described the cultural and social pressure she faced regarding the timing of marriage and how she was able to continue her education after marriage through negotiation,

This kind of marriage is done in agreement of both sides. First, someone from our side went to go talk to the groom's family and then after that someone from their side came to talk with my family.

It (the marriage) happened all of a sudden. I was not ready for the wedding. I was married with two weeks after the marriage was fixed.

I believed that being a girl in a traditional society like Nepal I had to get married relatively early and my friends, relatives and neighbors all told me that I had to get married one day. But I would have preferred to get my B.A. first.

And so I was concerned if I would be allowed to continue my studies after the wedding. Our parents on both sides agreed and I said yes to the marriage proposal. My husband's family is educated and they have supported me and my education.

Madan, a male respondent, had a combined marriage. He told his story about how his marriage turned from love into arranged marriage. He and his wife had been in love for several years while he worked overseas and she was in school in Nepal. After he finished his job in Malaysia, he went to the girl's parents to ask for the girl's hand. Then the parents suggested them to get married after their daughter completed schooling. He then promised to help the daughter to continue her education. At the time of the interview, his wife was not with him, but was staying at a boarding house to prepare for high school completion exams. They only met each other once a week.

Bharat, another male respondent, was in love with his wife for several years too. He was afraid that "people would backbite, criticize our relationship and there would be bad rumor in the village." So he and his bride eloped and got married. Similarly, Kavita, a female respondent, also had a love marriage. When she was only in the fifth grade, her family was unhappy that a daughter who would eventually move out was still staying at home doing nothing. Due to the family pressure, she soon eloped with her lover and was no longer in school after marriage.

There wasn't any work for me at home. My family did not support me and would shout or talk that daughters shouldn't live long with their parents. And they suggested that it would be better for them if I eloped and so I eloped.

Srijana, another female respondent, fell in love with her future husband during elementary school and went out secretly for several years. They got tired of being in a clandestine relationship, and finally decided to get married and were not in school after their marriage. According to her, love marriage is usually early and arranged marriage is usually late, which is consistent with Geeta's idea that arranged marriage involves a busy "shopping" process and thus usually takes a longer time.

We were ready to marry rather than meeting secretly.

I thought it (marriage) was earlier.

I don't know. May be love marriage is like this. It is earlier.

Mostly the love marriages are early.

It depends on the family. Love marriage has personal decision. Nobody can interfere. Otherwise, family plays important role.

Arranged marriage is generally late. It depends on parents.

Love marriage is based on love and self choice, with no parental involvement whereas arranged marriage is decided by parents, usually based on the couple's family status match (Applbaum 1995; 2007; Grover, 2009; Uberoi 1998). However, it is important to note that although much research assumes marriage type as a dichotomous variable, including love and arranged marriage, it should actually be understood as a continuum. In Nepal, even for young people who have an arranged marriage, the couple are increasingly involved in their marriage decision-making process (Ghimire, Axinn, Scott & Thornton, 2006). Further, Uberoi (1998) and Grover (2009) report that in India, some young people had "arranged love marriage." These young people fall in love, and then ask their parents to conduct a wedding for them, in seeking for social approval and support by parents. The concept is similar to the

term of combined marriage used in this study, which shows young people make compromise between personal autonomy and conventional authority to gain social acceptance.

Kishwar (1994) argued that women with an arranged marriage can continue to get financial and other support from parents while love marriage may greatly weaken this tie due to no parental support. Grover's (2009) ethnic research in Delhi, North India confirms this. In an arranged marriage, a woman usually keeps frequent contact with her mother after marriage. Her natal home can provide protection during hard times in her marriage and various support for her. However, love marriage violates this parental authority and matchmaking practice. There is usually certain resent and disapproval from the natal family. The married daughter thus lacks this mother-daughter bonding and financial and emotional buffer.

However, love marriage may be related to post-marriage schooling in two ways. Young people now have more opportunities to meet with each other with the expansion of mass education. They can meet in the neighborhood, at religious/cultural festivals and more commonly through school. They fall in love in school and then go out secretly. After young people are in love for several years, and eventually fed up with rumors, they may decide to elope and then come back to the young husband's home for nuptial life. It usually 'happens naturally' during their school years. Although they have the autonomy to decide to get married, financially they have to depend on the husband's family for a living. It is up to the husband's family if they are to continue their education. In contrast, for arranged and combined marriage, since the right time for a couple to get married is usually decided by the family members, the husband's parents may decide to allow the daughter-in-law to go back to school. There is usually a busy 'shopping' time to find a qualified mate. Then there is a

negotiation process between the two families, with a consideration of the young people's own opinion. Therefore, with the support and compromise from the family, young people can continue their school years if they have the desire to do so. Consequently, I have arrived at my fourth hypothesis,

Hypothesis IV: Those who have an arranged or combined marriage are more likely to continue their schooling after marriage, compared to their love marriage counterparts.

Further, as I hypothesized before, as educational attainment increases, women are more likely to continue their education after marriage. However, due to different dynamics among arranged, combined and love marriages, women may follow different trajectories regarding post-marriage education continuation as their pre-marriage education level increases. As education levels increase, young people may gain more autonomy, which can overshadow parental support and sources, or combined marriages with both personal autonomy and parental support may be the most likely. Hence, I come upon my fifth hypothesis,

Hypothesis V: As education level increases, those with a combined marriage are the most likely to pursue education continuation after marriage and those with a love marriage are the least likely to pursue it.

SURVEY DATA AND METHODS

Sample

The survey data is from the 2008 Ideational Influences on Marriage and Fertility Behaviors (IIMFB), Nepal. The IIMFB is a longitudinal panel study that investigates ideational changes regarding family behaviors in Nepal. The first wave of the study was conducted in 2008. The sample is from 151 neighborhoods in Chitwan Valley, Nepal,

including 7,456 men and women. The IIMFB collects data from all households in these neighborhoods. For my study, I first included 1,730 women who were married and between 15 and 34 years of age by 2007. I further deleted 25 women due to missing values and the analysis sample size is thus 1,705. I drew on logistic regression technique to predict whether these women continued their education or went back to school based on data from 2008.

Measures

The dependent variable, post-marriage education continuation is a dichotomous variable, measured by whether the respondent was in school for the complete year in the first year after her marriage. The reasons to use this measure is due to the following reasons, 1) for all the women who had ever gone to school after marriage, most of them had done it in the first year; 2) I did not include those who ended their schooling during the year considering these women may have to terminate their schooling due to student and family role conflict.

Independent variables include pre-marriage education completion, parental education, pre-marriage years of schooling and type of marriage. Pre-marriage education completion is measured by whether the woman was in school for the entire year in the year prior to her marriage or just beginning schooling at that time. It is likely that people decide to end schooling and get married in a short lapse of time or simultaneously. To avoid this endogeneity issue, I thus use whether women were in school for an entire year the year before marriage rather than the year at marriage. It is likely that women may have completed their schooling before marriage even if they were in school the entire year the year before marriage. Therefore, this measure likely overestimates school incompletion, and the effect of

marriage on post-marital schooling would be underestimated correspondingly. The real effect should be stronger and more significant.

Parental education is measured by the level of education of the woman's father and mother. For pre-marriage years of schooling, I employ the life history calendar data from IIMFB to construct accumulative years of schooling before marriage. I only use those years when women were in school for the entire year to construct this measure. For years when women began schooling, ended schooling or began and ended schooling in the same year, IIMFB did not provide information regarding how many months these women were in school. Therefore, it is a conservative measure of accumulative years of schooling. Another point deserving note here is that repeating grades is not uncommon in this context. Therefore, this variable reflects women's years of schooling, roughly measuring their educational attainment before marriage.

Type of marriage involves three categories of love, arranged and combined. Love marriage is the marriage formed due to young people falling in love with each other; and parents have no involvement or interfering in the context of Nepal. Arranged marriage is mainly decided by parents. Usually other older family members are also involved, but not the young couple themselves. After everything is planned, they inform the young couple concerning the marriage decision, asking for their final approval. Combined marriage is a type of marriage formation that is a combination between arranged and love marriages, for which parents arrange the marriage, and at the same time young people also actively participate in the decision making process. They make a joint decision regarding the young

people's marriage in the end. In addition to the above independent variables, I also control for the following variables: age, age at marriage, and mother's number of children.

Model

I use logistic regression to estimate odds ratios of post-marriage education continuation. I first examine whether pre-marriage education completion predicts women's post-marriage education. I further investigate whether their parents' education, their pre-marriage years of schooling and type of marriage explains the effect of pre-marriage education completion on post-marriage education continuation. Finally, I scrutinize whether there is an interaction between women's pre-marriage years of schooling and marriage type on their post-marriage education.

One feature of the IIMFB design is that individuals are clustered within neighborhoods. Inflated standard errors are a prominent issue (Raudenbush & Bryk, 2002). I use Proc GENMOD with SAS 9.1 to estimate the above models, which estimates the correlations among all the neighborhoods and corrects the possibly inflated standard errors.

REGRESSION RESULTS AND DISCUSSION

In total, about eight percent of married women have continued their education for the entire year in the first year after marriage (Table 2.1). If including women who were enrolled in school part of the year, then the percentage would increase to slightly more than one fourth. About 40 percent of women are in school for the entire year the year before their marriage. On average, parental years of education is low, only about four years. The average premarriage years of schooling is about eight. About half of the respondents had an arranged

marriage, about one fifth had a combined marriage and less than one third had a love marriage.

Model 1 shows there is a highly significant effect on post-marital schooling: if a woman was enrolled in school one year before marriage, she is more than 100 times more likely to continue education compared to those who were not in school then (See Table 2.2). This suggests in the context of Nepal, combining marriage and schooling is common. This is different from literature in Western, industrialized societies, where family and student roles are competing responsibilities and taking one usually means postponing or even forgoing the other. Further, Model 2 shows that for each additional year of parental education, married women's rates of post-marriage education increase by roughly five percent. In the context of Nepal, parents still control more resources and have more authority over their offspring's family formation. Parents who have more financial and socio-cultural resources may be more interested in investing in their daughter's education and thus would like their daughter to continue their education after marriage. They may be able to influence their daughter's post-marriage education by cultivating the preference for valuing education, providing certain resources, or even exerting influence on the husband's family directly.

Moreover, Model 3 presents that each year of a woman's pre-marriage schooling increases her rates of going to school after marriage by about 20 percent. Further, the number of years of pre-marriage schooling explains more than half of the variation of the effect of premarital educational incompletion on post-marital schooling. Quitting school after marriage without finishing means losing the potential for highly paid jobs in the future for well educated women. Educated women have high status in the husband's family. The

husband's family may be more likely to help them to realize their preference for continuing education by providing financial support and helping with household duties.

In Model 4, combined marriage is associated with a higher rate of post-marriage education continuation than love marriage, by 39 percent. It may be easy to assume that those who had a love marriage may have more 'modern' values and desires and for that reason may value education more. Yet, it is not surprising that those with a combined marriage may have similar autonomy to those with a love marriage. They may equally desire to continue schooling after marriage if they have not completed it. However, those with a combined marriage may have endorsement of their marriage from their parents. They are thus more likely to have both financial and other support from parents concerning education continuation after marriage. In contrast, in the society where parents still have more resources and authority that are significant to young people's lives, people who had a love marriage may have the autonomy to form their own marriage, but not necessarily are able to continue their education after marriage due to lack of resources and possibly support from their parents. Surprisingly, those with an arranged marriage are not significantly different from those with a love marriage. It is likely that due to educational heterogeneity, the effect may cancel each other. That is to say, the effect of arranged versus love marriage on postmarriage education continuation may depend on education. Model 5 confirms that there is a significant interaction between arranged marriage and pre-marriage years of schooling on post-marriage education continuation. Results not shown here shows that as the education level increases, the effect of arranged versus combined marriage on post-marriage education continuation is also significant. The trajectory is similar to that in Figure 2.1. I use Figure 1

to visually present the odds ratio changes of type of marriage on post-marriage education continuation as years of pre-marriage schooling increases.

In Figure 2.1, years of education increases the rates of post-marital schooling for all three types of marriages. Note here, only arranged marriage is significantly different from love marriage. There is a crossover at year thirteen of schooling, which is about college education where advantages of arranged marriage disappear. For those with an arranged marriage, women are generally more like to continue their education, compared to those in a love marriage. It is not until university education that the difference is reversed. In general, parents tend to control more resources and provide help for those with an arranged marriage to continue their uncompleted education. For those with a love marriage, it is not until they are at the university level that their economic prospect and their autonomy overshadow their parents' influence over them.

CONCLUSION

A prominent strength of this research lies in its using both qualitative and quantitative data collected at the same time in the same region. Qualitative data together with existing literature help to extract contextually relevant hypotheses regarding how married women combine family and student roles in Nepal, which is in contrary to much of the literature and women's marriage behaviors in Western, industrialized societies. Further, representative quantitative data provide rich data to test these hypotheses and help contribute to understanding patterns of women's marriage behaviors in this region.

Further, this study tests women's marriage and education behaviors in a cultural setting where rapid social changes are under way. Individuals face social forces of industrialization and westernization and the desire to move up the socioeconomic ladder. At the same time, they are also under strong influence of local customs and family and kinship network. It is thus an ideal place to investigate how women are "inventive" in combining student and family roles in a context different from Western, industrialized societies. This study contributes to the literature of family studies and women's education in that it is important to understand women's family and education behaviors in a specific cultural context and to realize the relevance and applicability of theories and empirical research in Western, industrialized societies. This inventive family pattern scrutinized in this research indicates that family behaviors are not necessarily converging toward the Western pattern. And the model of transposing the current family pattern in Western societies to the future of current developing societies is a dangerous way of "reading history sideways."

In the cultural context of Nepal, to juggle education and marriage is not uncommon among Nepalese women who have not completed their education before marriage. The Nepalese cultural practice and family structure, such as parental authority and controlling of resources and post-marriage patrilocal living arrangement, seem to provide solid support for this distinct family pattern. However, it is important to note that the cultural practice and family structure here is treated as the social context. Future research can be conducted to measure characteristics of the cultural context of the transition in progress, and test relevant hypotheses, such as whether living with the husband's family helps with married women's schooling and whether parents use their financial resources and their social influence to help with their married daughter's schooling. In addition, this research provides a unique

perspective focusing on women's characteristics to understand how Nepalese women combine family and student roles after marriage. Future research should bring men into the research and examine how husband's characteristics and their family background have impacts on this social phenomenon.

More specifically, this study finds that more educated women may be more likely to and also more able to follow this inventive pattern of combining family and student roles. Education not only means better economic prospects in the future, but also is important cultural capital. These women have both autonomy and resources, including cultural and financial resources to pursue advancement in family status and personal accomplishment. Being educated can both mean being "modernized" and being competent in employing cultural resources. However, it is important to be aware of potential endogeneity issues here. It is likely that some women may postpone their marriage until the completion of a university degree. The study sample includes all married women regardless of their education activities after marriage. Education still shows positive effects. Further, some college students may have to marry while in school due to parents' concerns about their age. The result that these college students are more likely to continue education compared to their less educated counterparts nonetheless indicates that they may have more autonomy and higher status in the husband's family.

It also shows that women with an arranged marriage are usually more likely to continue schooling after marriage, compared to those with a love marriage. Those with an arranged marriage make compromises to historic culture and as a result have gains in their personal development. However, education reverses this pattern. For highly educated women, both those with combined and love marriages are more likely to pursue education after

marriage. Those with a combined marriage take the format of an arranged marriage, showing respect to local customs and cultural authorities, but are also able to keep their autonomy. The reverse effect of arranged versus love marriage on post-marriage schooling at the college education further reduces the endogeneity concerns: those college students with a love marriage may have higher autonomy compared to their counterparts with an arranged marriage and therefore are more likely to continue their education.

The implication is that, in the transitional societies where historic culture dominates and cultural forces of industrialized and Western societies are gaining momentum, compromising between young people and cultural authorities and between cultural practices and westernizing influences can be practical and beneficial strategies. Those who are able to take advantage of the possibility of compromise can thrive and be the transforming forces in these societies.

Table 2.1. Descriptives of All Variables, IIMFBN, 2008 (N=1,705)

Variables	Mean	Error	Minimum	Maximum
Post-Marriage Education				
Continuation	0.08	0.26	0	1
Pre-Marriage Education Completion	0.4	0.49	0	1
Parental Education	4.09	4.2	0	16
Pre-Marriage Years of Schooling	7.95	4.92	0	21
Marriage Type				
Love Marriage (Ref)	0.3	0.46	0	1
Arranged Marriage	0.48	0.5	0	1
Combined Marriage	0.21	0.41	0	1
Control Variables				
Age	27.67	4.05	15	34
Age at Marriage	18.51	3.14	7	30
Number of Mother's Children	5.26	2.09	1	14

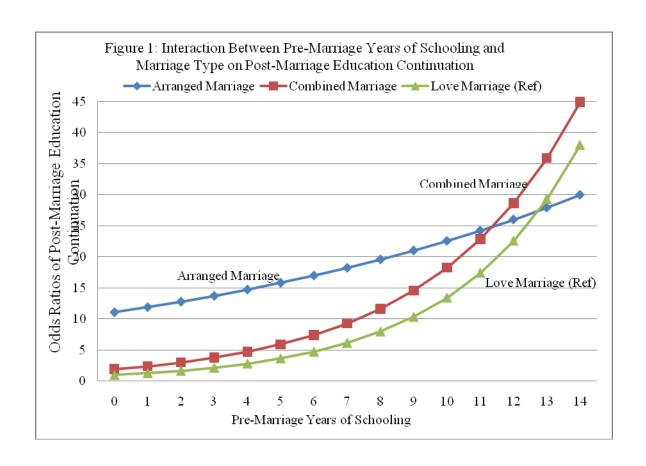
8

Table 2.2. Coefficients of Women's Characteristics on Their Post-marriage Education Continuation, IIMFBN, 2008

Variables	M1		M2		M3		M4		M5		M6	
Pre-marriage Education Completion	4.83	***	4.72	***	4.1	***	4.79	***	4.15	***	4.1	***
Parental Education			0.05	**							0.04	*
Pre-marriage Years of Schooling					0.16	*			0.26	**	0.14	*
Marriage Type (Ref = Love Marriage)												
Arranged Marriage							0.26		2.41	*	0.22	
Combined Marriage							0.39	+	0.66		0.41	+
Interaction Term												
Pre-Marriage Schooling*Arranged Marriage									0.19	*		
Pre-Marriage Schooling*Combined Marriage									0.03			
Control Variables												
Age	0.04	+	0.03		0.03		0.04	+	0.03		0.03	
Age at Marriage	0.19	***	0.17	***	0.03		0.18	***	0.03		0.04	
			-		-				-		-	
Number of Mother's Children	-0.1	+	0.08		0.08		-0.1	+	0.08		0.07	

One tailed test

⁺ p<.1, * p<.05, ** p<.01, and *** p<.001



CHAPTER 3

WHY MARRY EARLY WHEN OTHERS WAIT? INTERACTIONS BETWEEN ECONOMIC POTENTIAL AND MARITAL EXPECTATIONS AMONG AMERICAN YOUTH¹

INTRODUCTION

Profound changes in family behaviors have been occurring in the United States over the past few decades. The never-static American family has witnessed a continuously delayed entry into first marriage, a dramatic decline in marriage rates, a rapid increase in divorce rates and a sharp rise in nonmarital birth rates (Lesthaeghe & Neidert, 2006; Teachman, Tedrow & Crowder, 2000). Median age at first marriage increased from 20 to 25 during the period 1960 – 2003 for women and 23 to 27 for men during the same period (Lehrer, 2008; U.S. Census Bureau, 2004). Among these changes, the increase in age at first marriage, as well as the decline in marriage rates has drawn considerable media and policy attention. In contrast, a small but significant number of Americans continue to marry at an early age. During the first few years of the current century, approximately one third of all women marry before age 24, while one fifth of these marriages end with divorce by the time these women reach the age of 24 (Schoen, Landale & Daniels, 2007).

The time between late teens and young adults is "demographically dense": more transitions regarding family formation, education, and career occur during this period of time, compared to later stages of life (Rindfuss, 1991). According to Arnett (2000), young

people explore their identity, develop romantic relationships, and build career trajectories in preparation for adult roles during this "emerging adulthood," the ages of 18 to 25 in current industrial societies. From the perspective of life course theory, any transition in this dense and emerging time early in life can have profound impact on young people's socioeconomic achievement in their later life trajectories (Elder, 1981 & 1994). Early marriage is found to be associated with various negative outcomes in family behaviors and socioeconomic mobility in later years: higher rates of fertility (Teachman, Polonko & Leigh, 1987); marital instability (Booth, Rustenbach & McHale, 2008; Lehrer, 2008; Oppenheimer, 1988); lower educational attainment (Alexander & Reilly, 1981; Marini, 1985; Teachman, Polonko & Leigh, 1987) and occupational mobility (Otto, 1979).

Other studies found that minority and disadvantaged groups are more susceptible to early marriage formation. Examples include young people from lower social classes (Meier & Allen, 2008), those with low school performance and educational attainment (Glick, Ruf, White & Coldscheider, 2006), those from non-intact families (Bumpass, Castro-Martin & Sweet, 1991) and those with a Hispanic background (Glick et al., 2006; Teachman, Tedrow & Crowder, 2000). Further, the legacy of socioeconomic disadvantage is likely to be passed on to future generations through the process of family formation (Axinn & Thornton, 1992). The implications of early marriage formation for social inequality and stratification, therefore, are clear.

Research examining early marriage has declined dramatically after 1970s. The majority of the recent research on early marriage formation uses data either from the 1990s or the early few years of this century (Glick et al., 2006; Landale, Schoen & Daniels 2010; Lehrer, 2004; Johnson & Dye, 2005; Schoen, Landale & Daniels, 2007; South, 2001;

Wolfinger, 2003). Among the above research, much examines marriage formation together with other forms of union formation. Although the most commonly used covariates of family formation from the past literature, including demographic and socioeconomic characteristics are still associated with entry into early marriage in the 21st century (Uecker & Stokes, 2008; Landale, Schoen & Daniels, 2010), in-depth research (Schoen, Landale & Daniels, 2007) and research using most recent data are in urgent need to better understand early marriage formation dynamics in the first decade of this century. To extend this observation on early family formation, this paper thus incorporates the legacy of both economic and cultural theories in the field of family studies to explore the underlying dynamics of early marriage formation (Becker, 1991; Goldscheider & Waite, 1986; MacDonald & Rindfuss, 1981; Oppenheimer, 2000; Preston & Richards, 1975; Seltzer et al., 2005; Sweeney, 2002).

LITERATURE REVIEW

With respect to family formation, the economic approach usually examines the effect of education, employment, and income as indicators of economic resources on union formation and fertility. Past empirical research has demonstrated that economic resources are positively associated with marriage for both men and women (Bennett, Bloom & Craig, 1990; Goldscheider & Waite, 1986; Goldstein & Kenney, 2001; Lichter, et al., 1992; McLaughlin & Lichter, 1997; Sweeny, 2002). The dynamics for women, however, are far more complicated than men's. For women, effects of economic resources on marriage formation seem to be less strong than for men, and are not always significant (Carlson, McLanahan & England, 2004; Manning & Smock, 1995; Sassler & Schoen, 1999; Xie, et al., 2003). Yet college educated women are constantly reported to be more likely to get married

than their less educated counterparts (Goldstein & Kenney, 2001). The inconsistent impact of economic resources on women's marriage formation may be due to the fact that some women follow the social norm of acceptable gender roles to specialize in household production, rather than pursuing socioeconomic attainment (Becker, 1991; Carlson et al., 2004; Cherlin, 1992; Xie et al., 2003). Past research also suggests that economic factors cannot fully explain disparities in marriage rates by race and ethnicity (Wilson, 1996). The pure economic perspective is, thus, not sufficient in explaining the complicated dynamics of marriage formation processes.

In contrast to the "normative" timing of marriage, research reports that economic resources, such as family socioeconomic status, school performance, educational aspiration and achievement, are negatively associated with early marriage formation (Glick et al, 2006; Uecker & Stokes, 2008). However, this is not in conflict with the economic approach. Young people with more economic potential tend to concentrate on their human capital investment early in life, and thus skip early marriage formation. However, once they have accumulated sufficient economic resources, such as completing college education and finding a professional occupation, they move to marry much faster.

Cultural theories of family formation greatly enrich the understanding of the motivations underlying marriage formation, in addition to the economic approach (Axinn & Thornton, 2000; Cherlin, 1992; Hochschild, 1989; Thornton, Axinn & Hill, 1992). Beliefs, values, and social norms are also reported to impact the timing of marriage. Positive attitudes and high expectations toward marriage and other promarriage ethos such as desires and aspirations are reported to be associated with more marriage formation (Brown, 2000; Carlson et al., 2004; Clarkberg, Stoltzenberg & Waite, 1995; Lichter, Batson & Brown,

2004; McGinnis, 2003; Sassler & Schoen, 1999; Waller & McLanahan, 2004). Sassler and Schoen (1999) find that men who are more approval of the gendered labor division--which requires men to focus on market jobs and women to focus on household production, are more likely to marry; however, it is not true for women. Furthermore, the conflict between women's more egalitarian views and men's less egalitarian views of gender relationship is reported to deter single mothers from marrying their children's father (Edin, 2000). Many believe that the recent retreat from marriage, especially for those from low income groups, is partially due to the fact that low income people increasingly put high value and expectation on marriage. As the result, marriage becomes too expensive for them to afford (Bulcroft & Bulcroft, 1993; Edin & Kefalas, 2005; Gibson-Davis, Edin & McLanahan, 2005).

Along the line of cultural approach, Uecker and Stoke (2008) find the importance of religion is positively related to early marriage formation. Glick et al. (2006) suggest familisim can be employed in explaining high early marriage rates among Mexican girls and boys in the United States. Landale, Schoen, and Daniels (2010) report that young women who regard marriage as part of an ideal relationship and those who expect to marry early, are more likely to enter an early marriage.

Built upon the above two lines of research with respect to family formation, some research has explored the interplay between economic and ideational factors. White and Rogers (2000) posit a "possible period interaction," whereby effects of economic resources appear to vary in different periods of time. This interaction is likely a reflection of the interaction between changed social norms (ideational factors) concerning marriage and economic factors. As Wilson (1996) notes, the weaker are the social norms disapproving premarital sex and nonmarital birth, and the stronger are the economic effects on marriage

formation. Furthermore, the effects of Black men's economic resources on Black women's marriage formation are stronger compared to previous cohorts (Testa & Krogh, 1995), and are also stronger compared to White women's marriage formation (Bulcroft & Bulcroft, 1993; South, 1991). This outcome is possibly reflected by both the changed norms of the marriage standard among Black women, and racial differences in the social norms concerning marriage. Some ethnographic research confirms that financial obstacles are the most important barrier preventing low income women from forming a marriage, in spite of their high hopes and expectations concerning marriage (Edin & Kefalas, 2005; Gibson-Davis et al., 2005). The implication is that for these women, to realize their marital expectation into an actual action is depending on how many economic resources either they or their partners possess. Therefore, an interactive approach which extends the two lines of research tradition and focuses on the interaction between economic and ideational factors, such as attitudes, expectations, and social norms can shed new light to the study of family formation. Furthermore, it can help to solve the failure of the pure economic approach in explaining family formation behaviors among some social groups.

In consistence with this interactive approach, in a study examining educational engagement and early family formation, Glick et al. (2006) identify an interaction between school engagement and race and ethnicity on early family formation. Mexican boys and girls with low school engagement or no school enrollment are more likely to form early marriage compared to other ethnic groups. The authors suggest that the social norms of 'familism' among Mexican Americans may affect their decision making and help them perceive school and family roles as more compatible. Therefore, the interactive approach extending research in general family formation can also apply to early family formation.

THEORETICAL FRAMEWORK AND HYPOTHESES

This research uses a multidisciplinary approach, integrating perspectives from economics, social psychology, and sociology to examine how economic potential and early marriage expectation and social norms favoring early marriage structure decision making concerning entry into early marriage. The economic approach including contributions from both economics and sociology (Becker, 1991; Oppenheimer, 1988) highlights the roles of economic resources and concerns about future economic certainty in the process of marriage formation. The psychological reasoned action theory is focused on the ideational dimension, including individuals' intentions, attitudes, and subjective norms (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Sociological perspectives underlie the social norm of "being appropriate" in a relevant social context and emphasizes on social approval as reward, in contrast to economic incentives (Bourdieu, 1977; March, 1994; Montgomery, 1998).

Therefore, the empirical question relevant to this paper becomes: what contribution can each of these perspectives make in disentangling the dynamics of the various motivations underlying an individual's decision making concerning early marriage formation?

Economic Theories

Established by Gary Becker (1991), the New Home Economics theory applies an individual rational choice approach to areas of family behaviors, including divorce, marriage, fertility and relationships between family members. This approach is well known as the "specialization and trading model" in the field of family studies. Linking activities at the microeconomic (individual) level to trends at the macro (societal/group) level, this approach assumes that individuals are forward-thinking, consistent in their behaviors and act to maximize their individual welfare. Correspondingly, men and women seek to maximize their

individual utility when forming a marital union based on gender specialization. For example, men specialize in the job market; women specialize in household production such as housework and childbearing. The two exchange the products of their respective specializations in the marriage. This approach, therefore, associates men's economic resources with higher marriage rates, while a woman's economic independence is claimed to account for marriage retreat.

Unconvinced by the specialization and trading model, Oppenheimer (1988 & 1997) proposes a search-theoretical model to explore the process of looking for a spouse, which suggests that the uncertainty of spouse candidates' traits would increase search time. She emphasizes that the adults' economic roles have systematic and important impact on marriage timing because work significantly structures individuals' lifestyle in industrial societies. Following the gender role specialization model in the "traditional time" when women focus more on home production rather than on market work, a set of factors related to uncertainty of men's future economic roles are significantly associated with marriage timing. However, as women increasingly participate in the labor market, a parallel set of factors related to uncertainty of women's future economic roles add to the complexity of the spouse search process. Oppenheimer further explains that women's economic resources do not buy economic independence from men, but increase gains to marriage by increasing economic interdependence between husband and wife via their contribution to the economic pool. Therefore, women's economic roles increase the search time, resulting in postponed marriage. However, due to the gains to marriage, women's economic roles encourage rather than deter marriage formation, which differs from what the rational choice approach claims. Oppenheimer's contribution to the economic approach lies in the following aspects, 1) she

debunks the economic utility maximization approach, but never downplays the importance of economic factors and economic motivations (the "rational" motivation of an individual actor) in the process of marriage formation; 2) she illustrates the great complexity of how economic resources and concerns of future economic certainty pattern marriage timing; and 3) she switches the focus of the field of family studies from blaming women for marriage decline to equally and objectively evaluating both men and women's economic resources on marriage formation.

The historical changes in family behaviors also support Oppenheimer's theory (1988 & 1997). During the era of the manufacturing economy in the 1950s, a man's income was sufficient to support a family, while a woman had limited job market opportunities. The specialization model allows for utility maximization for both partners in a marriage in this social context of constrained opportunities for women. This type of conventional marriage in the 1950s, promoting men as the single breadwinner in the family, was also supported by the social norms of the time (Cherlin, 2005; White & Rogers, 2000). This support provided additional affirmation for the married couple. With the economy restructuring from 1970s, women's job opportunities and income have increased significantly. In contrast, young men and men with less educated have experienced a considerable decrease in employment rates and income (White & Rogers, 2000). As the dual-earner family became the norm and stood to gain the most benefit in the economic restructuring (White & Rogers, 2000), it would be unwise and less viable to sacrifice a second income to specialize on household production.

Drawing from the life course perspective (Elder, 1981 & 1994), individuals make decisions about family formation and career establishment during the transition from

adolescence to young adulthood. The timings of career and early family formation are usually in conflict during this period. Accumulation of human capital for career building, such as education, work experience and training of special skills, usually requires an intensive and long-term investment. Correspondently, young men and women who are competent in school and have high expectation of college education may regard early family formation as bearing a too high opportunity cost. Although their later economic resources can eventually facilitate their family formation, they would thus postpone entry into early marriage for these long term benefits.

Hypothesis I:

Adolescents with better economic potential will be less likely to enter early marriage, compared to their less promising counterparts.

Social Psychological Theories of Reasoned Action

Fishbein's and Ajzen's (1975; Ajzen & Fishbein, 1980) theory of reasoned action claims that an individual's behavior is determined by his or her intention to engage in a certain behavior. An individual's intention is a function of their attitudes and subjective norms. An individual's attitude refers to his or her evaluation of a potential outcome (Becker, 1991). A subjective norm is the perception of "significant others" acceptance of one's behavior. Here the term "norm" embeds individuals in their personal relationships or network with important others, which is a significant difference from Gary Becker's purely individual perspective. Relevant to intentions to perform certain behaviors, expectations can also predict relevant behaviors. Further, individuals' attitudes and subjective norms can also influence their specific expectations concerning certain action. Applying this perspective to early marriage formation, young adults' expectations of marrying early are, therefore, associated with their actual marital behaviors.

Hypothesis II:

Adolescents with higher expectations of early marriage will be more likely to marry at early ages, compared to their counterparts with lower expectations.

Social Norm Theories: The Logic of Consequence versus the Logic of Appropriateness

Some sociologists extend rational choice theory to explore motivations underlying social behaviors from the perspective of role theory (March, 1994; Montgomery, 1998). Corresponding to the social roles they play in the social context, individuals either follow "the logic of appropriateness" (social norms) to act reasonably, or follow "the logic of consequence" to rationally maximize utility. For example, following "the logic of appropriateness," a friend is obligated to cooperate to obey social norms. However, following the logic of consequence, a business man calculates costs and benefits to maximize utility (Montgomery, 1998). Or put it in a modified way, standing in his professional role, the business man is allowed to follow his rational facet of his being and focus on pursuing economic gains.

The above role expectation following is consistent with social norm obedience which can be understood as an extension of the subjective norm motivation proposed by Fishbein and Ajzen (1975; Ajzen & Fishbein, 1980). Moreover, social norms are not just bounded by a narrow social role or an aggregate of personal relationships. They are relevant to a specific social context, in which individuals pursue approvals and avoid sanctions by the society. A social norm compliant chooses to behave appropriately in specific social contexts for social approval, instead of solely focused on economic gains (Bourdieu, 1977). Therefore, both economic consideration and social norm obedience can motivate an individual's decision making regarding a certain action.

Take a real life context as an example to illustrate how both economic concerns and social norms obedience can work to impact early marriage formation here. A young woman grows up in a neighborhood where early marriage is the norm. She thus may likely perceive this pro-early-marriage ethos and may also consider forming an early marriage sometime in the future. However, it merits discussion here that social norm is a more aggregate concept at the group, community or societal level, in contrast to individual characteristics such as attitudes or beliefs. Its impact on young people's behaviors at the individual level can operate through complex mechanisms. The regression techniques to regress main effects of social norms may not be able to detect the direct effects. In the following section of "an Interactive Framework," I will conduct a more theoretical discussion concerning the possible ways social norms shape individuals' behaviors through their actual decision making process.

Hypothesis III:

Adolescents who live in social contexts where social norms favor early marriage will more likely marry at relatively early ages, compared to those living in social contexts where social norms do not favor early marriage.

An Interactive Framework: economic vs. non-economic motivation interaction

For the above discussion, we can see that the dynamics of decision making regarding early marriage formation involves not only economic considerations, but also attitudes or expectations and certain social norms. Here, I argue that whether individuals act solely for economic gains or not is conditional on their beliefs, attitudes, and expectations with respect to the concerned action, and on the prevailing social norms in their social contexts. In other words, individuals' attitudes and expectations and social norms serve to modify or condition the "rational" aspect (economic concerns) of an individual's decision making process.

Because individuals embedded in particular social contexts usually have a set of attitudes and

expectations, they would make decisions by balancing "motivations of being appropriate" versus "motivations of pursuing economic gains." Specifically, the motivation of being appropriate functions as a conditional and regulatory force to modify the motivation of pursuing economic gains.

Therefore, the integrative framework of this study argues that both economic and non-economic motivations are elements inside an individual's "tool kit¹" box for decision making concerning a certain behavior or action. These two motivations are dependent on each other. Economic motivations can suppress effects of non-economic ones when the two are in conflict. For example, a young woman is certain about going to college and attaining a bachelor's degree and also aspires to marry before 20 years old. Considering the possible conflicts between school and family responsibilities, she may choose to complete college education before marriage. Further, economic motivations can also strengthen effects of non-economic ones when the two are compatible. Take another example, a young man from a humble family background believes in the American dream and works hard to achieve a middle class lifestyle. He also fancies marrying one day in his life. His actual achieving of the middle class status can speed up his moving to marriage.

Furthermore, social norms as aggregate influences are different from individual attitudes or expectations. I'd like to use game chips and rules to illustrate how the two may work through different mechanisms. If individual non-economic attitudes can add a chip to the game in addition to the chip of economic concerns, then social norms can change the rule of the game. More specifically, social norms can shape the way how individuals perceive costs and gains concerning marriage formation. As the result, individuals can actively reformulate the perceived costs and gains of certain behaviors to be compatible with social

norms. For example, in a neighborhood where early marriage is socially favorable, it is thus deemed as rewarding or even associated with a certain status achievement. It is then not perceived as bearing a high opportunity cost compared to socioeconomic upward mobility. Therefore, an individual not only perceives early marriage and upward social mobility as compatible rather than as in conflict, but also take actions to make them happen: a college student from this social context may choose to marry early and continue the college education at the same time.

A few things merit notion here. First, commonly used socioeconomic factors in family studies, such as education, educational aspiration or expectation, employment, income, and economic potential may represent more economic related motivations in respect to marriage formation. However, they are not measures of economic motivations, but contribute to the understanding of economic motivations. Similarly, many ideational factors such as attitudes, aspirations, expectations, and social norms regarding marriage formation reflect more non-economic related motivations, but are not direct measures of that. Second, ideational factors do not always represent non-economic motivations. They can be about economic concerns; for example, aspiration of a middle class income in the future. Because they reflect economic related motivations, this paper thus treats this type of indicator as economic factors rather than ideational factors. Third, economic and non-economic motivations can both be in conflict and also be compatible in respect to marriage formation. It is important to note that social norms can either facilitate or deter individuals to make these two motivations compatible. Social norms this study discusses are understood as norms regulated in different social contexts that are relevant to different social boundaries, such as community. However, the social boundaries can also be extended beyond physical limits to

the social division along the lines of gender, race and ethnicity, social class and religion.

Fourth, the term of interaction refers to a mutual dependence. For example, an interaction between educational expectation and social norms on family formation can be interpreted as either the effect of social norms depending on educational expectation or the effect of educational expectation depending on social norms. For convenience and consistence, this paper describes interactions between economic potential and ideational influence as economic potential dependent on ideational influence.

Hypothesis IV:

The effect on early marriage formation of adolescents' economic potential is dependent on their early marriage expectations. For those who have lower expectations of early marriage, economic potential will have no effect on early marriage formation; whereas for those with higher early marriage expectations, economic potential will have a negative effect.

and, Hypothesis V:

The effect on early marriage formation of social norms favoring early marriage is dependent on adolescents' economic potential. For those who live in social contexts where early marriage is the norm, economic potential will have a positive effect on early marriage formation; whereas for their counterparts, economic potential will have a positive effect.

DATA AND METHODS

Data

The data I use to test the hypotheses comes from the National Longitudinal Study of Adolescent Health (Add Health). The Add Health data was collected from a nationally representative sample of youth in grades 7 through 12 in the United States (Bearman et al., 1997; Harris et al., 2003). A total of 145 schools were selected, including 80 high schools and their feeder middle schools. The sample was stratified by region (suburban, urban, or

rural), school type (public, private, or parochial), ethnic mix, and school size. Four waves of data collection have been completed. Between 1994 and 1995, 20,745 adolescents in grade 7 through 12 were recruited for the Wave I in-home survey. The Wave IV in-home survey was conducted between 2008 and 2009 and included 15,701 individuals who were 24-35 years old at the time of interview, with more than 98% percent of respondents between 26 and 32 years old.

This study uses data from Waves I and IV. All the independent variables are from Wave I when respondents were in grades 7 through 12. Data from the in-home and in-school surveys are merged with census data provided by Add Health data. The dependent variable, timing of early marriage, comes from Wave IV. I dropped 905 cases due to lacking of valid sample weights. An additional 5 respondents who married under 15 years of age were excluded, leaving a final study sample of 14,801. Missing values for all variables were imputed using indicator/dummy variable adjustment except specified in the text (Cohen, Cohen, West & Aiken, 2003).

Measurements

Timing of Marriage. The dependent variable is timing of early marriage, marrying before 22. It is measured by the question "In what month [and year] were you married?" Month is used as the unit of analysis for the hazard of marriage. Because this study investigates early marriage, I use the age 22 as the upper bound for age at first marriage. There are two reasons to employ this cutoff point: 1) According to the developmental perspective, the age range between 18 and 25 is a transition period from adolescent to adulthood when young people in industrialized societies explore and experiment to form their identity and prepare for career (Arnett, 2000). Forming a marriage right in the middle of this period at age 22 would seem

"early" when others are still exploring and experimenting different roles. 2) The age 22 is used as a "middle-class bias" because 22 is a typical age at college graduation. Accordingly, marriage before this age means either incompletion of college or no starting of professional career, and is thus "normatively" early in a middle class lens (Lowe & Witt, 1984; Uecker & Stoke, 2008)². 3) As recent as 2003, the median age at first marriage is 25 for women and 27 for men (U.S. Census Bureau, 2004). The age of 22 years would be thus regarded early. Therefore, to examine young men and women's early marital formation behaviors, the observation time starts from age 15 until either the respondent gets married or reaches age 22, whichever arrives first. Accordingly, respondents who married after 22 are censored at the time of age 22.

Measures of Economic Potential. For measures of economic potential, I take into consideration that adolescents usually are neither completely economically independent nor well established in their careers. Xie and et al. (2003) argues that an individual's long term economic potential is theoretically more significant than his/her current income when making long term decisions concerning marriage. The decisions are based not only on their past and current income but also unobservable expectations concerning future income streams. To approximate an adolescent's economic potential, I use measures of school performance and expectations regarding attending college. I take the average of math and English scores to measure school performance. The higher scores indicate better school performance. For those who had missing values either in math or English, I use whichever of the two variables has a valid score to measure grade. The expectation to attend college is measured by the question "how likely is it that you will go to college?" The responses are on a scale of 1 to 5, where 1

is low and 5 is high. I transform the answers to probabilities of going to college: 0%, 25%, 50%, 75%, and 100%.

Measures of Expectations of Early Marriage. Individual's early marriage expectations are measured by the question "What do you think are the chances that each of the following things will happen to you?" The responses to "You will be married by age 25" include: (1) almost no chance, (2) some chance, but probably not, (3) a 50-50 chance, (4) a good chance, and (5) almost certain. I convert the 5-scale answers to probabilities of 0%, 25%, 50%, 75%, and 100%. This is the closest measure for early marriage expectation from Add Health data. It is possible that those who expect to marriage by age 25 may do so by marrying by age 24 rather than 21. Therefore, this measure underestimates the effect of early marriage expectation by age 22 to some degree. The real effect of early marriage expectation by age 22 would be more significant and stronger if there is an effect with the measure of early marriage expectation by age 25.

Measures of Social Norms concerning Early Marriage. The social norms associated with early marriage are measured at the aggregate level: the school and neighborhood levels.

Much previous research relates the nonintact family to early marriage (Axinn & Thornton 1992; Goldscheider & Goldscheider 1998; McLanahan & Bumpass 1988; McLeod 1991; Thornton 1991; Waite & Spitze 1981). Wolfinger (2003) further specify that children from divorced family are more likely to form a marriage by age 20 but not after that. If parental divorce is related to early marriage formation, ideally, high proportion of divorced parents in the neighborhood would catch the dynamics of the correspondingly high rates of early marriage. Therefore, the proportion of divorced parents can approximate whether early marriage is normative or not or "how normative" in the neighborhood. Following this logic,

this can be used as a measure to approximate neighborhood norms favoring early marriage. However, Add Health data did not provide information about parental divorce when respondents were in grades 7 through 12 in 1994 and 1995. The closest measure I can get is to construct the proportion of single parents in social contexts where they live.

I thus calculate the proportion of single mother families at each school to approximate school norms favoring early marriage². This calculation is based on the constructed variable of family structure (Harris, 1999). For the neighborhood norms, it is measured at the census tract level, which most research regards as the neighborhood where daily activities occur (Harris & Ryan, 2004). It is approximated by the proportion of female headed households with children but no husband present among all family households (to save space, in the following writing, school norms favoring early marriage and neighborhood norms favoring early marriage are referred as school norms and neighborhood norms, respectively). High values of single mother family proportions either at a school district or a census tract mean more approval of early marriage in the relevant social contexts.

Two concerns merit notion here. 1) If only marriage as early as before 20 is affected by nonintact family structure, the effect of the above two social norm measures on early marriage by 22 is likely to be less strong and significant than the effect on early marriage by 20. 2) If only divorce affects offspring's early marriage, the measure built upon single mother family can underestimate the effect on early marriage formation of social norms favoring early marriage.

Control Variables. I control for age, gender, race and ethnicity, birth country, language spoken at home, and parental socioeconomic status. I use age from Wave IV, subtracting birth time from interview time, because age for some respondents from Wave I is incorrect.

For gender, females are codes as 1 and males as 0. Further I use the variable from Wave IV because the one from Wave I has two missing values. Race and ethnicity includes the following categories: non-Hispanic white, non-Hispanic black, Asian and Pacific islander, Native American, Hispanic, non-Hispanic multiple race and others, with non-Hispanic white as the reference category (To save space, they are referred as white, black, Asian, Native American, Hispanic, multiple race and others). I code those who were born in the United States or came to the United States before 1 year old as 1 and others as 0. Non-English language spoken at home is codes as 1 and English as 0.

Parental socioeconomic status is measured by residential parents' education, employment, and family income. Parental education is calculated by higher education level of the two parents, and is collapsed into five categories: less than high school, high school, some college, college and above, and also a missing category, with college and above as the reference category. Parental employment status measures whether respondents' parents worked for pay at the interview time of Wave I and the past 12 months, including: neither working for pay, either working for pay, both working for pay and a missing category, with both working for pay as the reference category. Family income is coded into 5 categories: under poverty (<=\$16,000 per year), close to poverty (\$16,000 - \$32,000), well above poverty (\$32,000 - \$50,000), middle class and above income (>=\$50,000) and a missing category, with middle class and above income as the reference category.

Analytic Strategies

This study uses event history analysis to examine data. Discrete-time hazard models are used to examine the influence of covariates on the monthly risk of marrying. Each individual has multiple cases of time (months) from age 15 until he/she marries or reaches

age 22, whichever goes first, and those who marry in the first month only have a single case of time. The hazard model employs the following equation to estimate the monthly risk of getting married,

(1) Log
$$(p/1-p)=\beta_0+\mathbf{X}_k\mathbf{\beta}_k$$
,

where X is the vector of explanatory variables and β is the vector of parameters of the explanatory variables. The analysis unit is person-months. By exponentiating β , the result represents an odds ratio, which approximates the probability of those getting married versus the probability of those not yet getting married. The odds ratio is equivalent to the hazard in the Cox proportional-hazard model: a hazard equal to one represents no effect, less than one represents a negative effect and greater than one represents a positive effect on early marriage timing.

I first examine the main effects of economic potential, individual early marriage expectation, and school and neighborhood norms favoring early marriage. After that, the interaction effects between economic potential and ideational measures are estimated. I employ PROC SURVEYLOGISTIC with SAS 9.1 to estimate discrete-time hazard models. The SURVEY LOGISTIC procedure is thus adopted to deal with the weights, strata, and clustering issues of Add Health data.

RESULTS

Table 3.1 presents weighted descriptive of this study. About 15% of respondents eventually got married before 22 years old by the end of Wave IV of Add Health. The average score of school performance was 3.76. Respondents' average value of expectation of

going to college was 85%. The mean expectation of marrying by age 25 was 56%, slightly above the category of "a 50-50 chance." The average of the proportion of single mother family households among all households was 21% for each school and 10% for each census tract. There were 49% females versus 51% males. The average age of respondents was 29 by the end of Wave IV. There were 66% whites, 15% blacks, 3% Asians and 12% Hispanics in the study sample. About 5% of respondents were born out of the United States, and another 7% spoke a language other than English at home. There were slightly more than one third of respondents whose parents had "college and above education", slightly less than one third whose parents had "high school education" and another one fifth whose parents had some college education. For the majority of respondents (59%), both parents worked for pay, and for slightly more than one third of respondents, only one parent worked for pay. Slightly less than one third of respondents' families lived either under poverty or close to poverty and a similar proportion of respondents' families had "middle class or above income".

Table 3.2 presents Models 1 through 7 that estimate independent effects of economic potential, early marriage expectation, and social norms favoring early marriage on entry into early marriage. Model 1 is the baseline model including all control variables. Women's hazards of early marriage are 2 times of that of men's. Age does not show an effect, maybe due to the inclusion of the observation time. The hazards to marry before 22 are about 60% lower for both Blacks and Asians, compared to whites, whereas Hispanics and multiracial respondents are not significantly different from whites. The low early marriage formation rates for blacks are consistent with their overall low marriage rates; the lower rates of early marriage for Asians may reflect their postponing to entering marriage until their certain level of socioeconomic achievement, considering their overall marriage rates are not remarkably

low. The lack of significant difference between Hispanics and whites suggests that their promarriage ethos may cancel out the effect of their lower economic status on early marriage formation. Further, where a respondent was born or what language he or she speaks at home does not seem to impact early marriage formation.

Respondents whose parents had "less than high school" education have a hazard 90% higher to form an early marriage, those whose parents had "high school" education have a hazard 70% higher, and those whose parents had "some college" education" have a hazard 64% higher, compared to those whose parents had "college and above" education. Parental employment does not have much effect although it tends to have positive effects. When it comes to family income, those with "under poverty" income, "close to poverty" income and those with "well above poverty" income have higher hazards to form an early marriage, compared to those with "middle class and above" income: the margins are 56%, 75% and 80%, respectively. The general message from the effects of parental education and family income is that the middle class family tends to protect their offspring from early marriage formation. Overall, early marriage formation seems to have markedly different patterns among people of different sexes, with different race and ethnic and class backgrounds. Considering much research associating early marriage to negative outcome in later life trajectory, this has significant implications on the status quo in the society and the perpetuation of the current social stratification system in the United States.

Models 2 and 3 show that both school performance and educational expectation deter early marriage formation. The hazards of having early marriage (64%) for respondents who had a highest score of 5 for school performance are 20% lower than that (84%) for those who had a lowest grade of 2. Whereas, early marriage hazards of respondents who were 100%

certain about going to college are about one third lower than that of those who were 0% certain about going to college. In Model 4, expectation of early marriage has a significantly positive and strong effect on early marriage formation. Those who were 100% certain about expecting an early marriage have early marriage hazards that are almost 3 times than that of those who were 0% certain about marrying early. Remember, the variable of marital expectation from Add Health is measured by expecting to marry by age 25. If we have a measure of marital expectation by age 22, its effect would be stronger. Neither school nor neighborhood norms regarding early marriage have any direct effects on early marriage formation, as shown in Models 5 and 6. However, these were expected in the "Theoretical Framework and Hypotheses" section of this paper. To prove relevant, the significant interaction effects between social norms and economic potential that I will discuss later indicate a complicated mechanism connecting social norms and early marriage formation.

Model 7 is the full model. Effects of all control variables remain similar. The effects for both black and Asians and that for parental education tend to be slightly weaker. It is possible that socioeconomic and cultural factors tend to entangle with race and ethnicity to shape the trajectory to early marriage. Future research is needed to untangle the underlying patterns. Economic potential and early marriage expectation have similar effects compared to single effect models. Yet, the effects of school and neighborhood norms regarding marriage become stronger while remaining insignificant.

Table 3.3 reports significant interactions between educational expectation and early marriage expectation and social norms favoring early marriage. Unfortunately, school performance does not seem to interact with the above ideational measures. It is likely that school performance as a more objective measure may not capture as much the dynamics of

economic motivations relevant to early marriage formation as measures such as educational expectation and school engagement. Therefore, school performance is also less likely to capture the interplay between the economic and non-economic motivations.

Because it is less intuitive to interpret interaction effects directly from numbers from Table 3, I use Figures 1 through 3 to present interactions between educational expectation and early marriage expectation and social norms favoring early marriage as reported in Table 3: the figures show patterns of changes in odds ratio when educational expectation increases for respondents holding different early marriage expectation and for those who lived in different social contexts where social norms regarding early marriage vary.

Figure 3.1 shows that educational expectation tends to lower early marriage rates for those who were expecting early marriage in a more affirmative way (early marriage expectation = 75% and 100%). It is possible that the stronger one is motivated for a college education, or a middle class income in the future, the more like he/she perceives early marriage as bearing high opportunity cost. Therefore, one is less likely to marry early. Here, economic concerns seem to suppress the motivation to marry early. The slopes of the line are steeper for those who were more affirmative about early marriage expectation: educational expectation suppresses the effects on early marriage formation more for these young people. Compared to respondents with relatively high early marriage expectation, for those who were not taking sides about early marriage expectation (early marriage expectation = 50%), the effects of educational expectation become more moderate on early marriage formation.

The above interactions suggest that when economic concerns (reflected by educational expectation) and non-economic concerns (reflected by early marriage expectation) are in conflict, they tend to suppress each other's effects. Apparently, forming

an early marriage is in conflict with the timing of attending college and gaining a higher education degree. Therefore, if an individual desires an early marriage, the stronger he/she aspires higher education, and the more likely he/she is going to delay the marriage.

A different scenario occurs when individuals have relatively low expectations of marrying early (early marriage expectation = 0% and 25%). We can see that educational expectation does not have much effect. It is not surprising. For those who did not expect to marry as early as before age 22, there is no conflict between their marriage and education agendas. Correspondingly, the economic and non-economic motivations are not in conflict. Educational expectation does not affect early marriage formation for this group of young people at this stage of life; it is consistent with the scenario that they are likely to have higher rates of marriage after they achieve their educational goals at a later stage of life. Overall, when the motivation concerning getting married early is not in conflict with economic concerns, educational expectation does not have much effect. Whereas, when the motivation of getting married early is in conflict with economic concerns, educational expectation thus suppresses the former.

Figures 3.2 and 3.3 show similar interaction patterns on early marriage formation between educational expectation and school and neighborhood norms. For those who went to schools or lived in neighborhoods where early marriages were less favored (school norms = 0% and 15%; neighborhood norms = 0%), educational expectation is negatively related to early marriage formation. For those who went to school where early marriage is more favored or tolerant (school norms = 30%, 45% and 60%; neighborhood norms = 30%, 45%, 60% and 75%), educational expectation speeds up entry into early marriage, and the more early marriage is socially approved, the stronger is the effect of educational expectation.

It is likely that in social contexts where social norms do not favor early marriage, individuals likely have more negative impressions on early marriage, and perceive it as an obstacle for social mobility in adult life. Early marriage thus bears a high opportunity cost with respect to socioeconomic attainment in young adulthood. Therefore, educational expectation deters early marriage formation in these social contexts.

However, in social contexts where social norms favor early marriages, individuals are likely have more positive impressions on early marriage, and perceive it as socially and culturally rewarding. Early marriage formation and pursuing education and career are both deemed as accomplishments of life and regarded compatible with each other. Therefore, educational expectation speeds up early marriage formation in these social contexts.

DISCUSSION

The above results suggest that the more promising is individuals' economic potential, and the less likely they will enter an early marriage. Further, the greater individuals expect to marry early, and the more likely they will actually do so. This suggests that both economic and non-economic motivations shape young people's trajectory to early marriage. Moreover, when individuals are highly motivated to marry early, the economic motivation relative to upward social mobility in the future suppresses the early marriage motivation on actually forming an early marriage. Yet when individuals are not much motivated to marry early, educational expectation seems to lose the effects on early marriage. However, it is not because economic motivation does not impact individuals' marriage behaviors. The dynamics are due to the fact that these young people are more motivated by socioeconomic mobility rather marrying early, they thus postpone marriage. The interactions between individual level

characteristics support the first mechanism I proposed in the "Theoretical Framework and Hypotheses" section: when economic and non-economic motivations are in conflict, one can suppress the other's effect in the process of individuals' decision making, early marriage formation in this study.

Although both school and neighborhood norms did not show direct effect on early marriage formation, their interactions with educational expectation support the second mechanism I proposed in the "Theoretical Framework and Hypotheses" section: social norms can shape how individuals' evaluate costs and benefits of early marriage in relation to their economic prospect. When social norms support early marriage, marrying early is considered as rewarding and compatible with human capital investment for future socioeconomic mobility. As a result, high education expectation speeds up early marriage formation. When social norms are less approval of early marriage, marrying early is thus considered as bearing a high opportunity and thus not compatible with human capital investment for future socioeconomic mobility. Accordingly, high educational expectation thus deters early marriage formation.

Moreover, the interactions between social norms and individual educational expectation also suggest that social norms, culture, and other neighborhood level influences may influence behaviors through individual characteristics. And that is why although neighborhood effects are regarded as theoretically and sociologically important, statistical effects are not always found. Interactions between neighborhood and individual characteristics can be a very promising approach to explore the dynamics.

CONCLUSION

This research synthesizes the economic approach from economics and sociology, the psychological reasoned action approach, and the sociological social norm perspective.

Drawing on previous studies in both economic and ideational approaches in studies of family formation, it proposes an integrative framework that explores how economic and ideational factors, including social norms and expectation regarding early marriage interactively shape young people's decision making concerning early marriage formation. It extends to the legacies of economic and cultural approaches in the field of family studies. It further sheds light to the understanding of how economic and non-economic motivations shape a wide range of family behaviors, and how social norms shape individuals' evaluation of certain social behaviors as rewarding or as bearing high opportunity cost in different social contexts.

However, it deserves attention here that decision-making of marriage is usually a joint one confounded with that of cohabitation and childbearing. More marriages are preceded by cohabitations in recent decades. Therefore, young people felt social pressure to get married due to early pregnancy and they feel less of that now with the option of cohabitation. Therefore, early marriage is even more intriguing in this changing context of marriage, cohabitation and childbearing. Hence, the focus of this paper is early marriage. Future research on early marriage along this line should also take cohabitation into consideration to examine how experience of cohabitation may affect individuals' economic and noneconomic concerns regarding marriage formation.

Second, economic theories in family behavior implicitly assess the economic attractiveness of individuals on the marriage market from the standpoint of a spouse searcher. In this study, the measures of a youth's economic potential are less observable by others (Xie et al., 2003). By estimating the effects of economic potential, this study offers an alternative

approach to the study of marriage formation to investigate the motivations of the individual who is faced with the decision making about whether and when to marry, rather than from a spouse searcher's standpoint who evaluates or judges this individuals' attractiveness in the marriage market.

Third, many studies incorporate attitudinal and cultural norms when examining marriage formation. Among these studies, some only look at individual attitudes without inspecting broader cultural norms. Others examine both individual attitudes and cultural norms, while cultural norms are usually approximated at the individual level. This paper examines both an individual's own early marriage expectation at the individual level and social norms concerning early marriage at the aggregate level, the school and neighborhood levels.

Yet we should be cautious about interpreting the effects of marital expectation. It is possible that adolescents may have different marital expectation due to different family background, early childhood family history, their performance in academia and other dimensions, and their other characteristics. Unfortunately, due to the limitation of data, we don't have longitudinal to control for these unobserved characteristics. Although marital expectation may not be the ultimate cause leading to early marriage formation, the above unobserved effects may shape individuals' attitudes toward early marriage. Therefore, marital expectation can partially capture the dynamics of marital attitudes. We have reason to believe that the effect is in the right direction, but the magnitude can be modified due to possible conflicting effects among the unobserved characteristics. It is thus important to keep in mind to interpret this relationship as association rather than causation and this association is moderated by one's economic potential.

Last, this research has implications for understanding the complicated patterns of early marriage formation specially and marriage formation in general among different social groups and in different cultural contexts. It discards the traditional way to homogeneously assume that economic factors tend to have same or similar effects on marriage formation across social groups and culture. Social norm in this study is regarded as a complex concept which is contextually relevant. Different social groups defined by different social boundaries, such as gender, race and ethnicity, social class, immigration status, religious affiliation and so on. The theoretical approach and findings of this study thus have special implications on further investigating different patterns of family formation among different racial and ethnic groups, such as blacks, Hispanics and whites, among social groups of different class background and among men and women. Further, it is important to apply this theoretical approach to different culture contexts to further understanding how effects of economic factors can vary in different contexts.

Notes

1. This research uses data from Add Health, a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Information on how to obtain the Add Health data files is available on the Add Health website (http://www.cpc.unc.edu/addhealth). No direct support was received from grant P01-HD31921 for this analysis.

2. The economic vs. non-economic motivation interaction framework can be understood in Sewell's (1999) and Swidler's (1986 & 2001) culture schemas. As Sewell argues, culture is the dynamic conversation between "a system of symbols and meanings" and "the concept of practice." The system loosely and thinly "hang(s) together," and provides "a semiotic code." Faced with different situations, individual actors can selectively use the coding system to develop means to address and solve problems in practice. As I understand, Swindler's reading of culture as "strategies of action," "tool kit" and a "repertoire" is not in conflict with Sewell's practice which is guided by the coding system of "symbols and meanings." We can understand that Sewell's "semiotic code" can help to provide or develop Swidler's "tool kit." Nonetheless, Swidler provides a more detailed and convincing description of how culture influences action.

In my economic vs. non-economic motivation interaction framework, attitudes, expectations, beliefs, subjective and social norms belong to or are influenced by the culture coding system of "symbols and meanings." This system is fluid, negotiable and operates as a supreme coding system. Individuals use the cultural coding, take consideration of economic needs and characteristics of various situations, and thus create the "tool kit" and "strategies of action." To put this more specifically, in different social contexts, different social norms and cultural beliefs can shape the way individuals perceive costs and gains of certain action. Therefore different formulas are developed by individual actors. These different formulas can be understood as Swidler's "tool kit" and "strategies of action." With more experiences in various situations, individual actors can accumulate a larger repertoire.

However, different from Sewell and Swidler, this framework distinguishes economic motivations from non-economic ones. Following the Weberian tradition, this framework continues the conversation between rationality (related to something utilitarian or material) and culture (related to meaning and purpose).

3. To approximate the school level social norms regarding early marriage, I also calculated the school level proportion of residential mothers who married before the age of 18. Unfortunately, there is a large number of missing values among residential mothers' age at first marriage. I compared the distributions of all variables from the study sample and that from the reduced sample which includes only respondents who have valid values of their mothers' age at first marriage. The distributions are almost identical. I further ran the same statistical models as used in this paper for both the study sample and the reduced sample. A significant interaction and similar patterns are found between educational expectation and

mother's early marriage at the school level for both samples. The result from the reduced sample supports Hypothesis V and thus is presented as a graph in Appendix 1. As shown in Figure 3.4 in Appendix 3.1, the pattern is similar to Figures 3.2 and 3.3. Educational expectation is positively associated with early marriage formation for respondents from schools where high proportions of mothers married at young ages (school proportions of mothers' early marriage = 30%, 40%, 50% and 60%, respectively); and the effect of educational expectation is negative on early marriage formation for respondents from schools where fewer mothers married at younger ages (school proportions of mothers' early marriage = 0%, 10% and 20%, respectively). More detailed results can be provided upon request from the author.

Table 3.1. Weighted Descriptive Statistics, Add Health (N = 14,801)

Variables	Weighted Mean	Std. Error of Weighted Mean	Range
Married before age 22	0.15	0.01	0-1
Economic Potential			
School performance	3.76	0.02	2-5
Educational expectation	0.85	0.01	0-1
Early Marriage Expectation and Norms			
Early marriage expectation	0.56	0.01	0-1
School norms	0.21	0.01	0-0.58
Neighborhood norms	0.1	0.01	0-0.81
Control Variables			
Time	80.2	0.24	1-84
Gender (Ref = Male)	0.49	0.01	0-1
			24.25-
Age	28.84	0.12	34.67
Race and ethnicity			
White (Ref)	0.66	0.03	0-1
Black	0.15	0.02	0-1
Native American	0	0	0-1
Asian	0.03	0.01	0-1
Hispanic	0.12	0.02	0-1
Multiple race	0.03	0	0-1
Other	0.01	0	0-1
Birth country (Ref = the U.S.)	0.05	0.01	0-1
Language (Ref = English)	0.07	0.01	0-1
Family Socioeconomic Status			
Parental Education			
Less than high school	0.11	0.01	0-1
High school	0.31	0.01	0-1
Some college	0.21	0.01	0-1
College and above (Ref)	0.33	0.02	0-1
Missing	0.04	0	0-1
Parental Employment			
Neither working for pay	0.05	0.01	0-1
Either working for pay	0.34	0.01	0-1
Both working for pay (Ref)	0.59	0.01	0-1
Missing Family Income	0.02	0	0-1
Family Income			

Under poverty	0.13	0.01	0-1
Close to poverty	0.18	0.01	0-1
Well above poverty	0.17	0.01	0-1
Middle class and above (Ref)	0.29	0.02	0-1
Missing	0.22	0.01	0-1

 $Table \ 3.2. \ Odds \ Ratios \ of \ Socioeconomic \ and \ Ideational \ Factors \ on \ Timing \ of \ Early \ Marriage, \ Add \ Health \ (N=14,801)$

Variables	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
Economic Potential														
School performance			0.85	***									0.87	**
Educational expectation					0.73	*							0.69	**
Early Marriage Expectation and Norms														
Early marriage expectation							2.79	***					2.8	***
School norms									0.54				0.73	
Neighborhood norms											0.51		0.62	
Control Variables														
Time	1.04	***	1.04	***	1.04	***	1.04	***	1.04	***	1.04	***	1.04	***
Gender ($Ref = Male$)	2.02	***	2.07	***	2.06	***	2	***	2.02	***	2.02	***	2.08	***
Age	1.01		1.01		1.01		1.02		1.01		1.01		1.02	
Race and ethnicity														
Black	0.38	***	0.37	***	0.38	***	0.42	***	0.41	***	0.4	***	0.45	***
Native American	0.46		0.47		0.47		0.48		0.48		0.47		0.54	
Asian	0.4	***	0.41	***	0.39	***	0.41	***	0.41	***	0.41	***	0.43	***
Hispanic	0.82		0.76	*	0.81		0.83		0.84		0.82		0.79	
Multiple race	0.85		0.79		0.84		0.9		0.87		0.87		0.86	
Other	0.29	**	0.3	**	0.3	**	0.34	*	0.31	**	0.3	**	0.36	*
White (Ref)														
Birth country (Ref = the U.S.)	1.17		1.17		1.19		1.13		1.18		1.17		1.16	
Language (Ref = English)	1.11		1.19		1.11		1.07		1.12		1.11		1.13	
Family Socioeconomic Status														
Parental Education														
Less than high school	1.86	***	1.73	***	1.79	***	1.82	***	1.89	***	1.92	***	1.69	***
High school	1.7	***	1.62	***	1.65	***	1.67	***	1.71	***	1.74	***	1.57	***
Some college	1.64	***	1.6	***	1.61	***	1.64	***	1.64	***	1.66	***	1.6	***

Missing College and above (Ref)	1.47		1.4		1.48		1.43		1.52		1.53		1.33	
Parental Employment														
Neither working for pay	1.16		1.18		1.16		1.27		1.18		1.19		1.29	
Either working for pay	1.03		1.05		1.03		1.07		1.04		1.05		1.1	
Missing	1.89	*	2.11	**	1.83	*	1.88	*	1.88	*	2.01	*	2.31	**
Both working for pay (Ref)														
Family Income														
Under poverty	1.56	***	1.55	***	1.54	***	1.59	***	1.59	***	1.59	***	1.58	***
Close to poverty	1.75	***	1.69	***	1.72	***	1.78	***	1.77	***	1.76	***	1.72	***
Well above poverty	1.8	***	1.76	***	1.78	***	1.81	***	1.8	***	1.81	***	1.77	***
Missing Middle class and above (Ref)	1.64	***	1.58	***	1.62	***	1.66	***	1.65	***	1.67	***	1.62	***

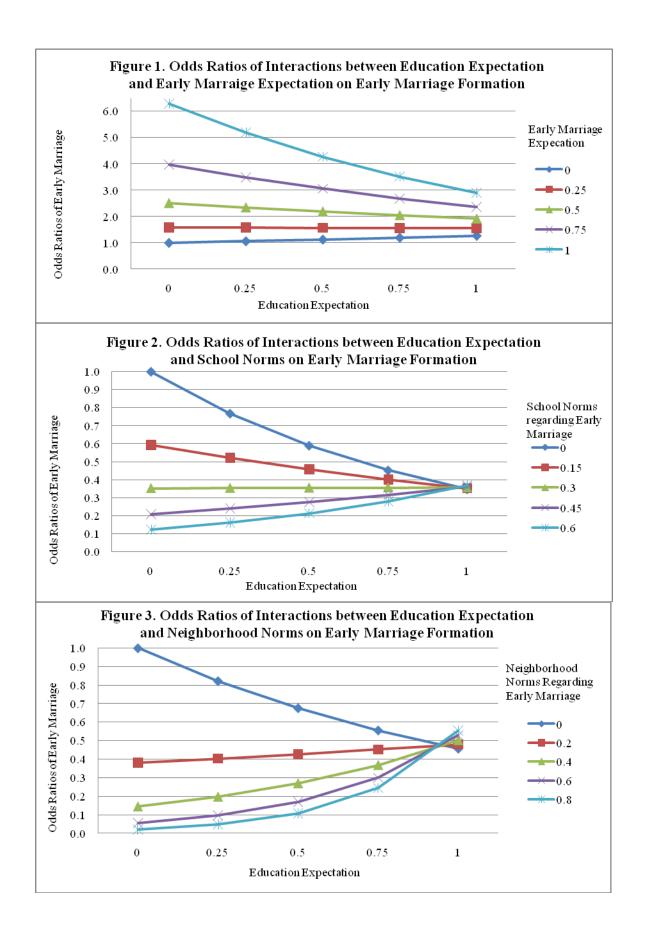
^{*} p < .05, ** p < .01 and *** p < .001 (two-tailed tests).

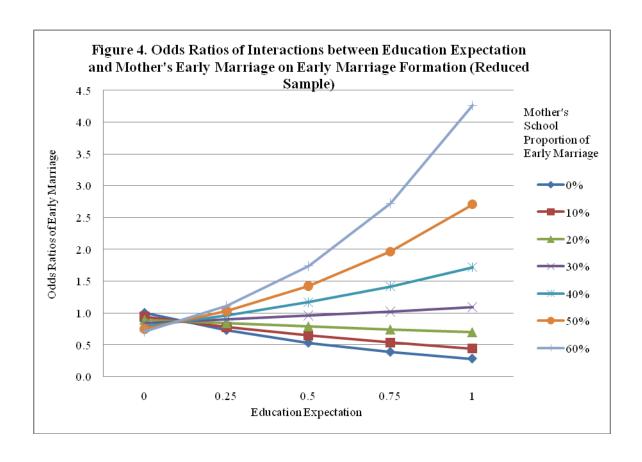
Table 3.3. Odds Ratios of Interactions between Socioeconomic and Ideational Factors on Timing of Early Marriage, Add Health (N = 14,801)

Variables	(1)		(2)		(3)	
Economic Potential						
School performance						
Educational expectation	1.26		0.35	***	0.46	***
Early Marriage Expectation and Norms						
Early marriage expectation	6.29	***				
School norms			0.03	***		
Neighborhood norms					0.01	***
Interactions						
Educational expectation*Early marriage expectation	0.36	*				
Educational expectation*School norms			35.59	**		
Educational expectation*Neighborhood norms					160.5	***
Control Variables						
Time	1.04	***	1.04	***	1.04	***
Gender ($Ref = Male$)	2.03	***	2.07	***	2.07	***
Age	1.02		1.01		1.01	
Race and ethnicity						
Black	0.43	***	0.41	***	0.4	***
Native American	0.49		0.49		0.48	
Asian	0.41	***	0.39	***	0.38	***
Hispanic	0.82		0.82		0.8	
Multiple race	0.89		0.85		0.84	
Other	0.35	*	0.31	**	0.3	**
White (Ref)						
Birth country (Ref = the U.S.)	1.15		1.18		1.19	
Language ($Ref = English$)	1.1		1.11		1.11	
Family Socioeconomic Status						
Parental Education						
Less than high school	1.72	***	1.82	***	1.84	***
High school	1.61	***	1.63	***	1.66	***
Some college	1.61	***	1.6	***	1.61	***
Missing	1.43		1.55	*	1.59	*
College and above (Ref)						
Parental Employment						
Neither working for pay	1.27		1.21		1.22	
Either working for pay	1.07		1.03		1.05	
Missing	1.78	*	1.78	*	1.91	*
Both working for pay (Ref)						
Family Income						
Under poverty	1.54	***	1.55	***	1.55	***

Close to poverty	1.75	***	1.72	***	1.72	***
Well above poverty	1.79	***	1.78	***	1.79	***
Missing	1.63	***	1.62	***	1.64	***
Middle class and above (Ref)						

^{*} p < .05, ** p < .01 and *** p < .001 (two-tailed tests).





CONCLUSION

This dissertation research synthesizes the economic rational choice approach, the social psychological reasoned action approach, and the sociological social norms perspective to propose an economic-noneconomic-motivation-interaction framework. The integrative approach is employed to examine marriage formation in both Western and non-Western contexts, marriage timing in Nepal and early marriage timing in the United States. The framework is supported in both settings.

The implication is that economic considerations/calculations regarding marriage are regulated by social norms and cultural stipulations in the specific context. It is risky to assume economic factors have similar effects in the same direction on family behaviors in different societies, and specifically, it is risky to uncritically, directly apply models concerning family behaviors in Western, industrialized societies to non-Western settings. For future research, it is important to use more economic indicators, such as employment, income, and occupation to better understand individuals' economic considerations/calculations.

Further, this framework contributes to the literature of family formation and stratification by adding complexity of interaction between economic and cultural factors. Marriage at a normative time is usually reported to be related to socioeconomic and psychological benefits for both men and women while early marriage is deemed to have a negative impact on women and their children. The cultural factors in this framework contributes to the literature that different groups of different socioeconomic statuses

regulated by different social norms in their social contexts may cumulate their advantage or disadvantage through marriage formation behaviors. However, it also deserves note here that when using personal beliefs and expectations as cultural factors to examine timing of marriage, the issue of endogeneity should be considered. It is thus important to include timevarying measures into the investigation.

Moreover, this framework is tested only on marriage formation in Nepal and the United States. It can be expanded to broader family behaviors and even health behaviors, such as cohabitation, marital stability, household labor division and divorce. Future research should also test this approach in various societies, especially transitional societies.

Along the line of understanding marriage behaviors in different contexts, I use both qualitative and quantitative data to investigate women's post-marriage education in Nepal. The Nepalese women do not necessarily forgo or delay marriage to pursue their educational goal. Facing the expansion of mass education and other nonfamily institutions and services, a significant number of women manage to take both family and student roles. The cultural context of universal and early marriage and extended family and patrilocal living arrangements is relevant here to this "inventive" family behavior. Future research should also pay attention to variations within the cultural context, such as comparing those living with parents after marriage and those not. It is important to be aware of the potential endogeneity issues: for example, college students may either postpone marriage for education or have to get married in school due to family pressure. Overall, the implication is that that family behaviors in developing countries do not necessarily converge to the Western pattern as modernization theory would predict. It is important to understand how people are inventive

in their own lives embedded in the social context of historical culture and increasing westernizing and industrializing forces.

Appendix I:

Exploratory Fieldwork on Marriage Processes in Nepal Interview Guide

Introduction: Thank you for agreeing to talk to us about your marriage process. We appreciate you taking time out of your busy day to talk with me. My name is _____, and I am from the Institute for Social and Environmental Research here in Chitwan. I help Yingchun Ji, a Ph.D. student in the US coming from China, to conduct research. She is very interested to learn everything she can from you. Because she comes from a different country, she doesn't know very much about marriage and having children in Nepal, so she looks forward to learning from you. For the next one hour or so, we would like to have a conversation with you about when and why you decided to get married. Please feel free to share your story with us since you are the expert about what you thought and did in your life. Yingchun has provided me questions to ask you. Even if it seems that I might know the answer to the question I am asking you, remember that Yingchun does not know much about life in Nepal, so that is why she is asking even the simplest questions. Please provide her with full and detailed answers, so she can learn a lot. Remember, if you ever feel like stopping our conversation, just tell us and we will stop. We don't want to be a bother to you. Now I will ask you questions. If it is alright with you, Yingchun is recording your interview so we can translate it later, and she can read it. Is that alright with you? OK, let's get started...

Demographics

- 1. In the process of selecting you to participate in this study, we asked some questions about your age at marriage, education level and other things, now we would like to collect a few more details on you and your spouse. How old are you currently?
- 2. Are you currently enrolled in school or do you have any plans to obtain any more education or training? IF YES: What are your educational goals?
- 3. How many years of education does your spouse have? Is your spouse currently enrolled in school or thinking of going back for more education? IF YES: What are his/her education plans?
- 4. When did you get married? What month and year? How old was your spouse when you got married?
- 5. What caste/ethnicity is your spouse?
- 6. Have you ever worked outside the home? If yes, what kind of work is/was that? Are you currently working outside the home? If not, why did you stop working outside the home?
- 7. Has your spouse ever worked outside the home? If yes, what kind of work is/was that? Is he/she currently working outside the home? If not, why did she/he stop working outside the home?

The Marriage Story

- 8. Now we would like to ask you to tell us about how your marriage came to be, who started the process, how you first met your spouse, and how you felt during the process. Can you tell us the story of how it unfolded?
 - Was it an arranged marriage or a love marriage, or some combination? What exactly do you mean by this? Can you describe to me what that type of marriage is like—I mean what usually happens in the beginning and all the way through to the marriage ceremonies?
 - Did it happen quickly or take a lot of time? What were the steps in the process?
 - Tell me how you met your spouse. Was there any middle-person who helped to arrange the meeting? Who is this person? Tell me more about how it came. Is the way you met your spouse the normal way that people do and get married? If not, what is the normal way?
 - Who initiated the marriage process (e.g., self, spouse, one of the other family members, neighbors, etc.)?
 - Was your family involved in deciding whether, when, and with whom you should get married? How did they get involved?
 - Did anyone else get involved too, such as your friends, neighbors or your spouse's family? Can you tell me the story about it?
 - Did others ever have different opinions than you had? Facing the conflict, what were your decisions and what did you do? What actually happened eventually? Can you tell the story about it?
- 9. Did you consciously/seriously think before you got married that you would get married at some point in your life?
 - Did you think through things like, what good things marriage will bring me or what bad things marriage will bring me? What was your thinking?
 - Did you think about when would be a good time/age to get married? Tell me more about what you thought about and considered before you actually got married.
 - Did you think about whether education would be good for your marriage? Did you think you should finish school before getting married? What were your thoughts on education when you thought about getting married? Why were you thinking that?
 - Do you think it is good to have a plan for marriage or to think it over thoroughly before you get married? Why?
- 10. Are you and your spouse currently living on your own? If not, are you living with your parents or your spouse' parents? Did you live with your parents/spouse's parents right when you got married? Has your or your spouse's living arrangements changed since your marriage? Can you explain to me where you and your spouse have lived since the time of your marriage and why it has been like that?

- 11. Do you think the amount of education you have gave you any advantage or disadvantage when you were getting married? How so?
- 12. Can you tell me any successful or not very successful marriage stories of any friends, relatives, or neighbors you know, due to the fact that he/she has some education or has no education?
- 13. Do you think the amount of work experience you have/having no work experience gave you any advantage or disadvantage when you were getting married? How so?
- 14. Can you tell me any successful or not very successful marriage stories of any friends or relatives, neighbors you know, due to the fact that he/she has nonfamily experience or has no such experience?

Timing of Marriage

- 15. People have different feelings about the timing of their own marriage. Sometimes it happens faster or earlier than expected, sometimes it is exactly as planned, and sometimes it takes awhile to find the right person.
 - At the time the marriage details were being decided, were you feeling that it was the right time for you to get married, or did it seem too early, or later than you had expected? Explain how so.
 - In general, when do you think is too early to marry? How long is too long to wait to marry? Why is that? Can you explain?
 - Do you know other people who had different experiences or feelings about the timing of their marriages? How so?
 - Specific Questions about significant others: Mother/Father/family members/friends/neighbors
 - How were your parents feeling about the timing of your marriage in the months before the marriage? Were they thinking it was time? Too early? Past time? How did they express their feelings to you? What kinds of things did they say? How could you tell what they thought?
 - What about neighbors or friends? Did they express opinions about the timing of your marriage? Did they show approval/disapproval? What about their attitudes about the timing of marriage in general? How do people tend to feel about this?

Potential Spouse Characteristics

16. Back to when you decided who to marry, what kind of characteristics made for an attractive spouse candidate? Why did you think these characteristics were important? Tell me a little more about what you thought.

- Was age of the spouse important? Education? Work experience? Personality? Family background? What are all the things to consider? What are the most important things?
- 17. In your opinion, why is it important that a spouse candidate has a good level of education/work experience/ good personality/ good family? What would be the difference between marrying someone with or without that characteristic? How would the marriage be different if marrying someone with or without that characteristic? (Note: when asking these questions, ask one characteristic at one time)? REPEAT FOR ALL CHARACTERISTICS DISCUSSED ABOVE.
- 18. Did you think his/her family background was important in terms of marriage? If so, what are important characteristics?
 - Did you think the following factors were important: parental education, whether parents have worked or not, number of siblings, living with parents after marriage, and so forth. Tell me more about what you think and why you think so.
- 19. Did your family have different opinions about what is important about whom to marry? What did they think?
- 20. Did your friends and neighbors have different opinions about what is important about whom to marry? What did they think?
- 21. Facing different opinions, especially opinions different than yours, how was the decision made? Did you have final say, or did your family make the decision? How was that process? Was there a lot of discussion, or how did it work?
- 22. What kind of characteristics, experiences, or anything else did you or your family think you should have to be a good spouse candidate yourself? What was it about you that made you a good spouse candidate? Please explain why.

Ideal Age of Marriage

- 23. Now I want to ask you whether you had an idea in mind before you got married about the best age for you to get married. If yes, what was it? Can you tell me more about what it means to you? How and where did you get the idea of a good age for marriage? Did you get married before/at/after your preferred age? Have you changed your ideas about when it is good to marry? If so, when and why?
- 24. What would you advise currently unmarried people now about the best age or time at which to marry? What would your advice be?
- 25. Different people might have different ideas about the right age to get married. For example, your parents, your friends, your neighbors or others might have different ideas. Among all these people including yourself, whose idea is the most important? Whose idea did you actually follow when you got married? Can you tell me more about how you made the decision and what you thought at that time?
- 26. What if any should be the qualifications for being ready to be married? Age? Education? Outside-of-home work experience? Family support? Being ready to have

children? What if someone has not finished with school but falls in love while parents insist this person to finish school first?

General Family Attitudes and Attitude Formation

- 27. Other than the ideal age of marriage, people have other attitudes/opinions towards marriage on different issues.
 - For example, some people think girls should marry before menstruation. What do you think about it? Why?
 - Some people think individuals should get married before or at their ideal age of marriage. Do you agree? Why?
 - Some people think it is important to their mothers to get married. Do you agree? Why?
 - Can you think of other ideas/attitudes that are important about whether or when to get married? What are they? Which are more important according to your opinion? Whose ideas are these: yours, your family's, your friends', neighbors', or others' in general?
- 28. How many children are you thinking you would like to have? Is there a number you would prefer? What is your thinking behind that? Did you prefer the same number before you were married? Did the process of getting married change your thoughts on how many children to have? Did you talk to your wife/husband about this before getting married? Did wanting to have children, or a certain number, relate to when you thought it would be good to get married?
- 29. Have you thought about whether you will use family planning methods to have a certain number of children? Do you mind sharing what you are thinking about these things? Do you think you will use some type of contraception at some point? Are these things you talk with your wife/husband about, or not? Do you feel like you know a lot about different methods, or at least what the best methods are, or not yet? IF YES... from where have you learned about different options for family planning?
- 30. Is there anything else about the marriage process in Nepal you think Yingchun should know? Did we ask questions about everything? What other things are important in when a person gets married or how it happens?

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