Schools, Schooling, and Children's Support of Their Aging Parents<sup>\*</sup>

Sarah R. Brauner-Otto

University of Michigan

<sup>&</sup>lt;sup>\*</sup> This research was supported by a grant from the National Institute of Aging. Direct correspondence to Sarah R. Brauner-Otto at the Institute for Social Research, University of Michigan, 426 Thompson St., Ann Arbor, Michigan 481061248. E-mail: sbrauner@umich.edu. I am grateful to John Knodel, Jennifer Eckerman, and William Axinn for their comments on earlier drafts.

# Schools, Schooling, and Children's Support of Their Aging Parents

## Abstract

Intergenerational transfers play an important role in most individual's lives across the life course. In this paper, I construct a new theoretical framework for understanding how changes in the educational context influence children's support of their parents by pulling together theories on intergenerational transfers and social change to study the relationship between social context and adult children's support of their aging parents. By examining multiple aspects of a couple's educational context this paper provides new information on the mechanisms through which changes in social context influence children's support of their parents. I find that both exposure to schools and schooling or education itself have separate, opposite effects on support of aging parents. Findings constitute evidence that multiple forms of intergenerational support exist simultaneously and are influenced by social change in different manners.

## Schools, Schooling, and Children's Support of Their Aging Parents

Intergenerational transfers play an important role in most individual's lives across the life course—to some degree all parents support their children, often believing that they will be repaid for their efforts in their old age. Consequent of the pervasiveness of intergenerational transfers in individuals' lives, numerous sociological theories describing behaviors ranging from elder care to childbearing touch on the role of intergenerational familial support. Children's support of their aging parents is gaining increased attention in both academic and policy circles. In wealthy countries baby boomers are facing serious financial and time strains as they are caring for aging parents and dependent children simultaneously. Several decades of delayed childbearing has further contributed to the growing numbers of adults facing this double burden. In poor countries changing social norms are leading to a decline in familial support for the elderly but governments have not instated wide reaching social support programs as a replacement.

The research reported here advances our understanding of intergenerational support in three ways. First, I construct a new theoretical framework for understanding how changes in the educational context influence children's support of their parents by pulling together theories on intergenerational transfers, the social modes of organization framework, and wealth flows theories to study the relationship between social context and adult children's support of their aging parents. Second, by examining aspects of both husbands' and wives' educational contexts this paper provides new information on the mechanisms through which changes in social context influence children's support of their parents. Third, by investigating both direct and indirect interactions with schools the findings presented here shed new light on the complex relationship between educational context and individual behavior.

## **Theoretical Framework**

Substantial bodies of literature exist on both the link between social context and individual behavior (Alexander 1988; Caldwell 1982; Durkheim [1933] 1984; Thornton and Lin 1994) and adult children's support for their aging parents (Becker et al. 2003; Hogan, Eggebeen, and Clogg 1993; McGarry and Schoeni 1997). However, little research has brought these two

topics together. This paper attempts to provide new information regarding the understudied relationship between the educational context and children's support of their parents. To do so, I combine the theories from these divergent branches of sociology into one theoretical framework. For theories regarding social context and individual behavior I rely on the modes of social organization framework and wealth flows theories. By combining these theories with those of intergenerational transfers I create a framework for understanding how changes in social context influence children's support of their parents.

**Theories on social context.** The modes of social organization framework describes a continuum on which communities lie. On one end are the many agrarian, subsistence oriented settings where, historically, most activities, including elder care, were centered on the family and kinship groups. As new non-family organizations and services spread, an important protective activity moves from within the family to outside the family. The community moves along the continuum towards the other end where all activities are organized outside of the family.<sup>1</sup> This movement along the continuum is an important part of the fundamental shift in the social organization of daily life that draws individuals out of social networks dominated by family members and into social networks linked to other non-family institutions. With this shift in daily life an individual's own ideas about certain behaviors and their perceptions of others' ideas about those behaviors begin to change (Thornton and Fricke 1987; Thornton and Lin 1994).

Caldwell's theory of wealth flows similarly details the link between macro and micro level changes and directly raises the issue of increasing individualization (Caldwell 1982). As communities move along the continuum so that more activities are organized outside the family, individuals become more individualistic. Over time, we see a broad emotional nucleation where individuals become more concerned with their own welfare and the welfare of their children and less concerned with extended families and familial networks. Notably, wealth flows shift to flow

<sup>&</sup>lt;sup>1</sup> In reality there are probably no communities at either end of this line, but there most certainly is variation in where they lie and where on the continuum they move to.

down from parents to children, instead of flowing up from children to parents. That is children would provide less for their parents.

Key to this theory is that these nonfamily organizations are influenced by Western societies and explicitly convey Western values. Schools are a prime example of such organizations. Often Western curricula are imported and used, unaltered, in poor non-Western societies that do not have the resources to develop their own culturally specific curricula. Exposure to these new values and ideas may influence individuals own values and behaviors (i.e. exposure to a Western curriculum may lead to emotional nucleation, which in turn may lead to changing family support behaviors). By exposure I mean both direct exposure through active participation with schools (via enrollment or work) and indirect exposure through interactions with those who work at the schools and may hold different values, through one's children's enrollment or participation, and through increased familiarity with the services offered (Caldwell 1982; Mead 1934; Zajonc 1968). In settings where community members have close, regular contact with one another we may expect these indirect effects to be even stronger.

Theories on intergenerational transfers. The literature on intergeneration transfers discusses two broad models of intergenerational transfers—the altruistic or mutual aid model and the reciprocal exchange model—both of which focus on individual, or microlevel, relationships. In the following paragraphs I combine the above discussed theories with these individual level theories and discuss how changes in social context, or movement along the continuum of communities, leads to changes in individual level patterns of children's support for their parents.

Under the altruistic or mutual aid model family members give to one another because they care about their well-being, often giving occurs in times of need (Hogan, Eggenbeen, and Clogg 1993; Lee, Parish, and Willis 1994; McGarry and Schoeni 1997). For instance, if a parent has an illness his/her child may help by cooking meals for the parent. This type of support from children may decrease as a result of the proliferation of schools. As mentioned above, as individuals have more exposure to schools they may become increasingly independent and individualistic. This is due to the increased time spent away from the family, increased

interactions with people who hold different values, and because of the new ideas introduced by the schools themselves. As individuals become increasingly emotionally nucleated they may change their definition of a crisis, thereby reducing the opportunities for altruistic giving.

Under the reciprocal exchange model family members may give in response to actual previous or expected future gifts (Goldscheider, Thornton, and Yang 2001). Two common examples of this are 1) adult children giving to their elderly parents to repay them for their investment in their (the adult children's) education and 2) parents giving to their children to insure that they will care for them (the parents) in their old age (Becker et al. 2003; Henretta et al. 1997; Silverstein, Parrott, and Bengtson 1995). There are several ways in which changes in social context may influence intergenerational transfers under the reciprocal exchange model. First, with the spread of schools children may actually give more support to their parents. Sending children to school is costly—uniforms, tuition, and supplies cost money and children are not able to contribute to the household production while they are actually attending school. As parents increasingly send their children to school and do so for longer periods of time, they may have larger repayments due to them in their old age. That is, children will have larger debts to repay and will therefore increase their transfers to their parents.

This effect will only occur when educating your children is viewed as a gift. When schools are rare and expensive, education is typically viewed as a domain for the wealthy-elite only. In this situation, children whose parents support their educational endeavors may be more likely to feel they need to pay their parents back for their investment. Consequently, I consider this to be the short term effect. Along with the increased availability of schools and schooling come new ideas about the meaning of childhood. As schools become more accessible, educating ones children may become an expectation, instead of an exception, in which case children may no longer feel the need to repay their parents. Consequently, with the building of more and more schools and the lowering of the students' costs of education I would expect this positive effect on children's giving to their parents to decline and in fact may become negative, as I describe next.

A second way in which changes in social context may influence intergenerational transfers under the reciprocal exchange models is that as more activities are organized outside of the family there may be fewer "debts" that adult children need to repay. As institutions such as day care centers, care homes for the elderly, and government benefits are created families cease to become the sole means of support during non-productive years. Consequently, whereas parents may have previously given to their children to insure their children would care for them later in life, they may now save their money so they are able to pay for nursing home care instead or they may receive government assistance instead of assistance from their adult children. Along these same lines, the advent of child care centers may also mean parents receive less support from their children. Previously, children may have supported their parents so that the parents would repay them by caring for the grandchildren. If the appropriate institutional resources exist, children may put those resources towards non-family child care, lessening the support they give their parents. What is important here is that under the reciprocal exchange model, if parents are no longer giving additional support to their children then they will also not receive support from their children later in life. This can be thought of as the long term effect of increased schooling accessibility on intergenerational transfers. In comparison to the short term effect discussed above, educating your children needs to be considered an obligation, or at the very least, the norm in order for this decrease in support for parents to occur.

#### Setting

Because social norms play a key role in determining patterns of familial support, it is important to consider carefully the specific setting in question here (Silverstein et al. 1995; Yang 1996). I examine the relationship between social context and intergenerational transfers in the Chitwan Valley in rural, south-central Nepal. This setting is ideal for studying this relationship for several reasons. Importantly, intergenerational support has historically played a large role in family life. Family ties and support have generally been very strong, especially towards the husband's family. Historically, for most ethnic groups living in Chitwan, a married son and daughter in law would live with the son's parents. However, this pattern has changed along with

the above described changes in social context and demographic behavior. In fact, analyses of the data used here and described below indicate that in 1996, only about one third of married couples were living with the husbands parents. Still, it is likely that familial ties are still stronger as they relate to the husband's family than to the wife's.

Also, Chitwan has recently undergone a period of rapid social change. Until the 1950s this valley was covered with virgin jungle and only sparingly inhabited by indigenous ethnic groups (Guneratne 1996). In the 1950s the government began clearing parts of the jungle, implemented malaria eradication efforts, and instituted a resettlement plan leading to the migration of many different ethnic groups, including both Buddhists and Hindus. By the late 1970s roughly two-thirds of this valley was cultivated and a small town, Narayanghat, was forming in one corner. However, the vast majority of residents were employed in agriculture and continued to use traditional methods of production.

In 1979 the first all-weather road was completed linking Narayanghat to India and eastern Nepalese cities. Following that two other roads were built—one to the west and one north to the capital city, Kathmandu. Because of Narayanghat's central location, it quickly became the transportation hub for the entire country. This led to the rapid expansion of education, health services, wage labor, markets, and mass transportation (Axinn and Yabiku 2001; Pohkarel and Shivakoti 1986). Between the time the jungle was cleared and 1995 over 100 schools were built in Chitwan. Important for the research proposed here, these changes in social context did not occur uniformly throughout the study area—different changes occurred at various times for separate segments of the valley. This allows me to examine these changes across time and space.

Dramatic changes in individual behavior followed these physical and community changes. For example, the mean age of first marriage rose from approximately 13 for those who married between 1936 and 1945 to approximately 18 for those married in 1966-1975 (Yabiku 2004). The total fertility rate (TFR) had been stable around 6 children per woman for as long as records are available (Banister and Thapa 1981; Tuladhar 1989), but fell over the 1990s to a TFR of about 4.6 by 2001 (His Majesty's Government 2001; K.C. 2003; Suwal 2001). Educational

enrollment has risen from virtually zero in the 1960s to 100 percent of both sexes entering first grade by 1996 (Beutel and Axinn 2002). Because of these concurrent and recent changes in both social context and individual behavior this setting is ideal for studying the relationship between educational context and children's support of their parents.

Also, as the above theoretical discussion pointed out, the indirect effects of schools on children's support of their parents may be particularly strong in a setting with small, tightly knit communities. Chitwan neighborhoods are small and consist of individuals and families who have regular contact with one another and intimate knowledge of each other's lives (Brofenbrenner 1970; Smith-Lovin and McPherson 1993; Valente et al. 1997). A typical neighborhood, or tol, consists of 5 to 15 households surrounded by farmland. Most activities, such getting ready for school, occur in the outdoor courtyard of each house, in plane view of neighbors. Neighbors will also meet and interact regularly at the common water source and grazing land.

### **Empirical Predictions**

I test two empirical predictions based on the above theoretical framework in this paper.

1. The amount of education children receive is related to their support of their parents. Children who have more education will give more support to their parents when the transition to mass schooling is still in its early stages. When education is still viewed as a rare opportunity and has not become widely available, those who achieve more education will have larger debts to repay their parents and will therefore be more likely to give support to their parents. However, when education is more accessible to more people and families, children will be less likely to give support to their parents because they will have smaller within household debts to repay. Having the education needs of children met by a non-family organization will reduce the amount of family effort put forth in educating the children. Because the theoretical framework presented above is ambivalent regarding effect of education (it could either increase or decrease the

amount of support given to parents), these analyses will require two-tailed tests of statistical significance.

2. Individuals who had schools nearby will be less likely to give support to their parents later in life. Indirect exposure to schools, that is exposure that excludes direct enrollment and includes informal interactions with others who have had direct exposure, will expose individuals to new ideas about the family and will instill more individualistic attitudes within those individuals. Increased individualism may lead to less altruistic support of parents because individuals feel less altruistic. Additionally, when education of children has transitioned from being a family activity (i.e. children are educated by their parents on topics their parents deem important) to a non-family activity (i.e. children educated outside the family), or from being a rare and expensive opportunity to an expectation, children will no longer have to repay their parents for the time and money they devoted to their education.

## **Data and Methods**

To test my empirical predictions I use data from the Chitwan Valley Family Study (CVFS) conducted in rural Nepal. This study combines survey and ethnographic methods to obtain detailed measures of community context and individual life histories. In 1996, the CVFS collected information from residents of a systematic sample of 171 neighborhoods in Western Chitwan Valley—it interviewed every resident between the ages of 15 and 59 in the 171 sampled neighborhoods, and their spouses. Because of large age differentials between spouses the age distribution of the final sample ranged from 13 to 80 years old. The overall response rate of 97 percent yielded 5,271 completed interviews. All interviews were conducted in the most common language in Nepal, Nepali (questions presented below are translated). Life History Calendar techniques were used to collect reliable information regarding residents' contraceptive behavior, marital and childbearing behavior, education, and labor force participation (Axinn, Pearce, and

Ghimire 1999). The CVFS also collected detailed accounts of neighborhood resources available since 1954.

I analyze data from 1,496 married couples, where both spouses are over age 16, who lived away from both of their parents at some point in their lives. I limit the sample in this way for three reasons. First, although some children do leave home for work or school opportunities, the vast majority of individual's leave their natal homes when they marry. Additionally, Nepalese society is generally patriarchal in structure (Acharya and Bennett 1981; Fricke 1986; and Gurung 1980). Women typically leave their natal home and move in with their husband's family when they marry and most decisions regarding household income are made by the husband. Therefore, I limit these analyses to married couples. Second, in order to investigate support of parents, it was necessary to restrict the sample to those who had lived apart from their parents. I discuss this further below when I describe the specific dependent variable I use. Third, I restrict the sample to those over age 16 because that is the age most individuals finish high school. Because I am interested in the role that education plays it was important that everyone in the sample had the opportunity to complete basic schooling.

Because the CVFS collected data from all individuals in the sample neighborhoods and their spouses we have full information for both husbands and wives. Information for both spouses was obtained in direct, individual level interviews, not in proxy interviews. I link each husband and wife to create a unit of observation at the couple level which incorporates full histories for both husbands and wives.<sup>2</sup>

## Measures of children's support of their parents

Respondents who had ever lived away from their parents were asked "Have you ever helped your parents by giving them grain, clothes, money, or something else while you were living away from them?" I use this question to create three measures of the couples support of

<sup>&</sup>lt;sup>2</sup> 29 men in this sample had 2 wives and 2 men had 3 wives. In these situations I use the information from the first wife's interview. I also tested models excluding these couples from the data and looking at the information for the  $2^{nd}$  or  $3^{rd}$  wives and found no substantive differences from the analyses presented below.

their parents: whether they gave support to either the husband's or wife's parents, whether they gave to the husband's parents, and whether they gave to the wife's parents. The first measure is equal to one if either the husband or the wife reported giving to his or her parents, and zero if neither reported giving. Seventy-seven percent of all couples reported giving to either set of parents (see Table 1). Descriptive statistics for this, and all measures used in the analyses presented in this table can be found in Table 1. The second and third measures equal one if the husband or wife reported giving to their parents respectively. These last two measures are not mutually exclusive of one another.

## (Table 1, About Here)

## **Measures of schooling (education)**

I create two measures of the couple's schooling or education experiences to test the first of my empirical predictions described above. According to the theoretical framework above, the degree of schooling, that is how much schooling a person obtained, may influence their support of their parents. Children who are sent to school for more years may have larger debts to repay their parents and will therefore give more support to their parents than children who only went to school for one year or less. Alternatively, children with more schooling may give less support to their parents because they have had more exposure to non-family organizations and therefore hold more individualistic attitudes. In either situation, the amount of school, not just having attended school may be important. As a result, the measures of schooling presented below incorporate the amount of schooling a person obtained. The first measure is a count for the number of years of schooling the husband had received before he was married. The second measure counts the number of years of schooling the wife received before she was married. The mean years of schooling for husbands in this sample was less than 6 years and it was less than 3 years for wives.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> I also tested dichotomous measures of whether the husband (wife) had ever attended school and found no substantial differences from the results presented below.

#### Measures of indirect exposure to schools

To test the second of my empirical predictions outlined above I create two measures for the couple's indirect exposure to schools (that is proximity, not direct exposure through participation/enrollment). The first measure equals one if the husband had a school within a five minute walk from his neighborhood in the year before he was married and zero otherwise. The second measure is created similarly, but refers to whether the wife had a school nearby. Previous research has found that availability within a 5 minute walk is the appropriate radius of influence to consider in this specific rural context with limited transportation infrastructure (Axinn and Yabiku 2001).

## Controls

Wealth is certainly an important characteristic to control for when investigating any type of support and I include four measures in these analyses. In Chitwan, Nepal household goods and landownership are a much more meaningful measure of wealth or of need of support than cash income and these wealth measures reflect this fact. The first measure is a dichotomous measure equal to one if the couple's household owns the land their house is on and zero otherwise. The second and third measures are counts of the number of large livestock and consumer durables the family owns, respectively. The livestock measure includes bulls, cows, buffaloes, sheep, goats, and pigs. The consumer durables measure includes radios, televisions, bicycles, motorcycles, carts, tractors, irrigation pumpsets, gobar gas plants, and farm tools such as threshers, chaff cutters, sprayers, and corn shellers. The fourth measure is a count of the number of stories in the house that the family is living in.<sup>4</sup>

Because the prevalence of schools has increased over time I control for husband's birth cohort. I create dichotomous variables for five birth cohorts: 1979-1972 (ages 17-24), 1971-1962 (ages 25-34), 1961-1952 (ages 35-44), 1951-1942 (ages 45-54), and 1941 or earlier (ages 55 and

<sup>&</sup>lt;sup>4</sup> Unfortunately, the only measures of wealth I can include in these models are of the couple's current wealth and necessarily measure wealth after the individual gave the support to his/her parents. However, since household measures such as these are typically stable over time I have included them in the models. The estimated effects displayed later are essentially the same if I remove the wealth controls from the models.

over). The 1941 plus birth cohort is the reference group for the analysis. I do not include a measure of wife's birth cohort because it is highly collinear with this measure of husband's.

In all models I control for the husband's ethnicity. Ethnicity in Nepal is complex, multifaceted, and interrelated with religion. A full description of the ethnic groups in this setting is beyond the scope of this article (see Acharya and Bennett 1981; Bista 1972; Fricke 1986; and Gurung 1980 for detailed descriptions). I use dichotomous variables to control for five classifications of ethnicity: high-caste Hindu, low-caste Hindu, Newar, hill Tibeto-Burmese, and terai Tibeto-Burmese. Each group has different propensities to use contraceptives to stop childbearing and different access to health services. High-caste Hindu is the reference group in all analyses. I also include a dichotomous variable equal to one if the husband's ethnicity is different from his wife's.

I also include a count variable equal to the number of children the couple had by the interview.<sup>5</sup> Couples with larger families may not be able to provide assistance to their parents because they have to devote more resources to their own children. It is also possible that couples with fewer children have smaller families because they have more individualistic or less family oriented attitudes and have therefore decided to have fewer children (Becker 1981; Thornton and Lin 1994).

I include measures of three parental characteristics because parents are likely to influence access to schools, the amount of education someone receives, and the amount of support the children give their parents. I create measures of both the husband's and the wife's parental characteristics to yield six measures in total. Two of these measures are dichotomous measures equal to one if the husband's father ever went to school and ever worked outside the home for pay. A third measure is a count of the number of children the husband's mother had. I created

<sup>&</sup>lt;sup>5</sup> Technically this measure is of the number of children the husband fathered. Because 31 men had multiple wives there is a slight difference between the number of children the husband fathered and the number the first wife gave birth to. However, these small differences do not influence the effect estimates presented in the tables below.

three comparable measures for the wife's parents.

Because the proliferation of schools is often accompanied by other non-family organizations which may have similar effects on children's support of their parents, I include controls for the number of other non-family organizations within a 5 minute walk the year the husband and wife were married (Axinn and Yabiku 2001; Caldwell 1982; Casterline 1985, 2001; Cleland and Hobcraft 1985;Gertler and Molyneaux 1994; Hernandez 1981). Neighborhood History Calendars were used to collect information on distance to the nearest employer, market, health service, movie hall, or bus transportation from the respondent's neighborhood before age 12. I use this information to create two indexes, one for husbands and one for wives, of local community context that counts the number of such services and organizations. The index ranges from zero (neither employer, market, health service, movie hall, or bus within 5 minutes) to five (all five services available).

Individuals' early non-family experiences may also influence the individual's support of their parents. I use information gathered on the Life History Calendars to create dichotomous measures of the husband's and wife's experiences with non-family work for pay (wage employment, salaried employment, or owning a business outside the home) equal to 1 if the husband (wife) worked for pay outside the home and zero otherwise.<sup>6</sup>

#### **Analytic Strategy**

I test my two empirical predictions separately, first investigating the relationship between schooling and supporting parents, and then the relationship between exposure to schools and supporting parents. When testing each prediction I first look at the effect of the husband's characteristics and then the wife's. Also when testing each prediction I first examine the

<sup>&</sup>lt;sup>6</sup> I also tested measures of an individual's experiences with non-family organizations such as health services and movie halls. These measures were not significant and I exclude them from the models presented here for parsimony.

relationship between schooling or schools and giving to either spouse's parents, then giving to the husband's parents, and then to the wife's parents.

To estimate models of the effect of schooling or education I use logistic regression of the form:

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 X_{jn} \qquad (\text{equation 1})$$

where *p* is the probability of giving support to parents, and *p*/1-*p* is the odds of giving support.  $X_{jn}$  represents the individual level explanatory variables for individual *j* in neighborhood *n*, including the individual level education variables.  $\beta_0$  represents the effects parameters of the individual explanatory variables.

For models of the effect of exposure to schools I use logistic regression of the form:

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 X_{jn} + \beta_1 S_n \qquad (equation 2)$$

where  $S_n$  represents the measure of exposure to schools for neighborhood *n*, and  $\beta_1$  represents effects parameters for these health service variables.

Because the individuals in the study are clustered with several individuals living in the same community who all have the same community characteristics, I estimate multilevel hazards models to take this data structure into account. The results presented in the tables below have all been calculated using the GLIMMIX macro for SAS.<sup>7</sup>

## Results

Table 2 presents the multilevel logistic regression estimates of the relationship between schooling, or education, and the likelihood of giving support to parents. The coefficients displayed are the multiplicative effects on the odds of giving support to one's parents. An exponentiated coefficient greater than 1.00 represents a positive effect, less than 1.00 a negative

<sup>&</sup>lt;sup>7</sup> There is at least one serious causal threat to this analytic strategy. Because the dependent variable refers to any point in the past it is possible that the key independent variables actually occurred after the dependent variable.

effect and equal to 1.00, no effect on the rate. For ease, I refer to the likelihood of receiving support, rather than the odds, in the discussion.

In Model 1 I show the effect of husbands' schooling on the support of either the husband's or the wife's parents. This effect is positive and statistically significant. Every additional year of schooling the husband received increased the likelihood of giving to either or his parents by about 6 percent. We see in Model 2 that the effect of wifes' schooling on support of either spouse's parents is not statistically significant. Models 3 and 4 show the relationship between husband's and wife's schooling and support of the husband's parents. These results are essentially identical to those of supporting either parent—husband's but not wife's schooling was related to giving support to the husband's parents. In Models 5 and 6 we see that neither husband's or wife's schooling was significantly related to giving to the wife's parents.

# (Table 2, About Here)

There are several interesting aspects regarding the control measures in these models. First, it appears that families who own their land are less likely to give support to their parents and this effect seems largely related to giving to the husband's parents, not the wife's parents. Second, the two younger cohorts seem to have very different giving patterns. The youngest two cohorts, those born between 1979 and 1962, were significantly more likely to give to the husband's parents, but less likely to give to the wife's parents than those couples where the husband was born before 1962. This may actually be due to changing household structures over time. Older couples were more likely to live with the husband's parents, and therefore less likely to provide other support for them under the definition used here. Consequently, were they in the position to provide support it would have been to the wife's parents. Couples and individuals born more recently are more likely to live independently from either set of parents thereby increasing the risk of providing support to the husband's family. Additionally, if they still maintain closer connections to the husband's family than to the wife's upon marriage, it is likely that the support that they once would have given to the wife's parents. They are now giving to the husband's, even further decreasing the support giving to wife's parents. These results may imply

that although a transition towards more individualistic attitudes and behaviors is occurring, it has not moved very far from it's starting point. That is, individual's may be more individualistic in that they live independently from their parents more often, but they still hold more patriarchal attitudes and maintain strong connections to the husband's family.

Third, there are variations in giving patterns across ethnic groups. Most notably, couples where the husband was terai-Tibeto-Burmese were more likely to give to the wife's parents but less likely to give to the husband's parents than couples where the husband was High caste Hindu. Fourth, giving to parents does not seem to be related the number of siblings the husband has. However, couple's are more likely to give, especially to the wife's parents, if the wife had more siblings. This is contrary to most theories and previous research which holds that with many siblings the burden of caring for the elderly is dispersed among them and each sibling is responsible for less support.

In Table 3 I present results for the multilevel logistic regressions of the relationship between exposure to schools and giving to parents. In Models 1 and 2 I show the effect of the husband (Model 1) and wife (Model 2) having a school within a five minute walk on the likelihood that the couple gave support to either of their parents. The effect was not statistically significant in either model. Models 3 and 4 show the effects of husband and wife's indirect exposure to schools on the likelihood of giving to the husband's parents—again, neither husband's or wife's exposure to schools was significantly related to giving. It is not until we look at the effect of school exposure on giving to the wife's parents that we see a significant relationship. Both husband's and wife's exposure to schools are significantly related to a lower likelihood of giving support to her parents. Specifically, if either the husband or the wife had a school within a five minute walk the year before they married the couple was about a quarter less likely to give support to her parents.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> I also tested whether the effects of husband's and wife's exposure to schools on giving to her parents were independent of one another. Due to the high collinearity of these two measures, when they are included in the same model neither one maintains its statistical significant. However, the magnitudes of the effect estimates do not change substantially.

## (Table 3, About Here)

#### Discussion

The theoretical framework presented in this paper brings together two disparate bodies of literature, one focusing on intergenerational support of the elderly and one on the effect of social change on family behaviors, to provide a new framework for investigating the relationship between social context and intergenerational transfers. As a result, this paper is a valuable step into the vast sociological question of how family and family relationships are connected to a wider social context. By exploring children's support of their elderly parents in a context currently experiencing dramatic social change we learn new information about the role and function of transfers and about familial responsibilities in a changing time.

The research presented in this paper investigates two specific predictions regarding this relationship between social context and intergenerational transfers. First, that increasing schooling, or education, will influence children's support for their parents in two potential manners. Children may increase their support of their parents if they have more schooling because they feel they have a larger debt to repay their parents given the parents lengthy time and financial commitment to sending their children to school. Alternatively, children may decrease the support the give their parents if non-family education has become an expectation in society. Once children's education has moved outside the home into schools and has become virtually widespread then children may feel that they have less of a debt to repay their parents—parents are no longer giving up their time to educate the children as a gift that needs to be repaid.

The analyses presented in this paper provide support for the first of these two pathways. Specifically, more schooling for husband's was associated with the couple giving more support to their parents. This may be because in Nepal, over the period for which these data cover, the spread of mass education was still in its early stages. Schools were being built and education was increasing, but long term school attendance was not the norm. In fact, in these data although it is

quite common for children to attend school very briefly, often for as little as one day, completing primary and secondary schooling is still rare (Axinn and Barber 2001; Beutel and Axinn 2002).

The second prediction this paper investigates is that increased exposure to schools will lead to children giving less support to their parents. With the spread of schools people have more interactions with people such as teachers, others who work at the schools, and neighbors who send their children to school. These interactions with non-family organizations lead to increased individualism which leads to less support for parents. The analyses presented here provide some support for this relationship. Living near a school was associated with giving less support to the wife's parents for both the husband and the wife.

It is important to emphasize that the analyses presented here are simply one piece of evidence to support the proposed hypotheses-they are by no means conclusive. As with all observational data, there are important questions of unobserved heterogeneity. However, I hope to increase the readers confidence in these findings by employing methodological techniques used in previous research examining the relationship between social context and individual behavior that are designed to address this problem that were (Angeles, Guilkey, and Mroz 1998). Another possible threat to these analyses concerns the temporal ordering of the measures used. It is not possible to determine in these data when the specific support to parents occurred. It may in fact have occurred before the measures of exposure to schools and schooling presented in this paper. I did however test multiple specifications of these key independent variables and found consistent results. Perhaps even more importantly, the specific context provides some information that may minimize this risk. In Chitwan, Nepal the vast majority of children live in their natal homes until they are married. Since the specific question used to measure children's support for their parents refers to instances when the child was not living with his/her parents, it is unlikely that these intergenerational transfers occurred before the measures of exposure to schools and schooling.

In addition to increasing our knowledge and informing our theories regarding how social context influences family relationships, the analyses presented in this paper have important

policy implications for Nepal and other countries in similar situations. Nepal is similar to other Asian countries both in terms of its physical or economic conditions and demographics, and in terms of the pressing policy issues it faces. As a result, the findings from this research may be applicable to these other countries. Like other Asian countries including China, India, Pakistan, Bangladesh, and Indonesia, the majority of Nepal's population are extremely poor and engaged in subsistence agricultural production. Situated between India and China, Nepal's population is a mixture of the ethno-racial groups originating in these two countries. Consequently, family life in Nepal is similar in many ways to family life in nearby regions of South Asia.

The rapid and dramatic social change that has swept through Nepal, and in many other countries, over the past 50 years has brought about many changes in the family. Historical systems of care, living arrangements, and familial responsibilities that once centered around or within the family network are changing to look more like Western, individualistic systems. However, there has not been a concurrent change in institution formation to accompany many of these new attitudes and behaviors. Most specifically related to the topic of care for aging parents, although young people are increasingly living alone and not supporting their parents there are no non-family institutions to replace them—the elderly are living alone in increasing amounts. As researchers, social scientists, and policy makers alike we should devote substantial efforts monitoring and understanding how the elderly are being affected in these rapidly changing societies.

## **Reference List**

- Acharya, Meena and Lynn Bennett. 1981. Rural Women of Nepal: An Aggregate Analysis and Summary of Eight Village Studies. Kathmandu: Tribhuvan University.
- Alexander, Jeffery C. 1988. Action and Its Environments: Toward a New Synthesis. New York: Columbia University Press.
- Axinn, William G., Lisa D. Pearce, and Dirgha J. Ghimire. 1999. "Innovations in Life History Calendar Applications." Social Science Research 28(3):243-64.
- Axinn, William G. and Scott T. Yabiku. 2001. "Social Change, the Social Organization of Families, and Fertility Limitation." American Journal of Sociology 106(5):1219-61.
- Banister, Judith and Shyam Thapa. 1981. The Population Dynamics of Nepal. Honolulu: East-West Population Institute.
- Becker, Gay, Yewoubdar Beyene, Edwina Newsom, and Mayen Nury. 2003. "Creating Continuity Through Mutual Assistance: Intergenerational Reciprocity in Four Ethnic Groups." The Journals of Gerontology 58B(3):S151-S159.
- Beutel, Ann M. and William G. Axinn. 2002. "Gender, Social Change, and Educational Attainment." Economic Development and Cultural Change 51(1):109-34.
- Bista, Dor B. 1972. People of Nepal. Kathmandu: Ratna Pustak Bhandar.
- Brofenbrenner, Urie. 1970. Two Worlds of Childhood: U.S. and U.S.S.R. New York: Russell Sage Foundation.
- Caldwell, John C. 1982. Theory of Fertility Decline. New York: Academic Press.
- Durkheim, Emile. [1933]1984. The Division of Labor in Society. New York: The Free Press.
- Elder, Glen H. Jr. 1977. "Family History and the Life Course." Journal of Family History 2(4):279-304.
- Elder, Glen H. Jr. 1983. "The Life-Course Perspective." Pp. 54-60 in The American Family in Social-Historical Perspective, 3 ed. editor Michael Gordon. New York: St. Martin's Press.
- Fricke, Thomas E. 1986. Himalayan Households: Tamang Demography and Domestic Processes. Ann Arbor, MI: UMI Research Press.
- Goldscheider, Frances K., Arland Thornton, and Li-Shou Yang. 2001. "Helping Out the Kids: Expectations About Parental Support in Young Adulthood." Journal of Marriage and the Family 63(3):727-40.

- Guneratne, Upali A. 1994. "The Tharus of Chitwan: Ethnicity, Class and the State in Nepal." University of Chicago.
- Gurung, Harka B. 1980. Vignettes of Nepal. Kathmandu: Sajha Prakashan.
- Henretta, John C., Martha S. Hill, Wei Li, Beth J. Soldo, and Douglas A. Wolf. 1997."Selection of Children to Provide Care: The Effect of Earlier Parental Transfers." The Journals of Gerontology 52B:110-119.
- His Majesty's Government. 2001. Statistical Year Book of Nepal 2001. Ramshah Path, Thapathali, Kathmandu: His Majesty's Government, National Planning Commission Secretariat, Central Bureau of Statistics.
- Hogan, Dennis P., David J. Eggebeen, and Clifford C. Clogg. 1993. "The Structure of Intergenerational Exchanges in American Families." American Journal of Sociology 98(6):1428-58.
- K.C., Bal K. 2003. "Migration, Poverty and Development in Nepal." Paper Presented at the Economic and Social Commission for Asia and Pacific Ad Hoc Expert Group Meeting on Migration and Development, 27-30 August 2003, Bangkok, Thailand.
- Lee, Yean-Ju, William T. Parish, and Robert J. Willis. 1994. "Sons, Daughters, and Intergenerational Support in Taiwan." American Journal of Sociology 99(4):101-1041.
- McGarry, Kathleen and Robert F. Schoeni. 1997. "Transfer Behavior Within the Family: Results From the Asset and Health Dynamics Study." The Journals of Gerontology 52B:82-92.
- Mead, George H. 1967. Mind, Self and Society: From the Standpoint of a Social Behaviorist. Chicago: University of Chicago Press.
- Pokharel, Bhola N. and Ganesh P. Shivakoti. 1986. "Impact of Development Efforts on Agricultural Wage Labor." Rural Poverty Paper Series No. 1. Winrock, Nepal.
- Silverstein, Merril, Tonya M. Parrott, and Vern L. Bengtson. 1995. "Factors That Predispose Middle-Aged Sons and Daughters to Provide Social Support to Older Parents." Journal of Marriage and the Family 57(2):465-75.
- Smith-Lovin, Lynn and J. M. McPherson. 1993. "You Are Who You Know: A Network Approach to Gener." Theory on Gender/Feminism on Theory, editor Paula England. New York: Aldine.
- Suwal, Juhee V. 2001. "Socio-Cultural Dynamics of First Birth Intervals in Nepal." Contribution to Nepalese Studies 28(1):11-33.
- Thornton, Arland and Thomas E. Fricke. 1987. "Social Change and the Family: Comparative Perspectives From the West, China and South Asia." Sociological Forum 2(4):746-79.
- Thornton, Arland and Hui-Sheng Lin. 1994. Social Change and the Family in Taiwan. Chicago: The University of Chicago Press.

- Tuladhar, Jayanti M. 1989. The Persistence of High Fertility in Nepal. New Dehli: Inter-India Publications.
- Valente, Thomas W., Susan C. Watkins, and Miriam N. Jato. 1997. "Social Network Associations With Contraceptive Use Among Cameroonian Women in Voluntary Associations." Social Sciend and Medicine 45:677-87.
- Yabiku, Scott T. 2002. "Marriage Timing and Social Change in Nepal." University of Michigan, Ann Arbor, MI.
- Yabiku, Scott T., William G. Axinn, and Arland Thornton. 1999. "Family Integration and Children's Self-Esteem." American Journal of Sociology 104(5):1494-524.
- Zajonc, Robert B. 1968. "The Attitudinal Effects of Mere Exposure." Journal of Personality and Social Psychology 9(monograph supp. 2):1-27.

## Table 1. Descriptive Statistics

	Mean	SC	Min	Max
Support of parents				
Gave to either husband's or wife's parents	0.77		0	1
Gave to husband's parents	0.66		0	1
Gave to wife's parents	0.35		0	1
Schools				
Exposure to schools				
Husband had school within 5 minute walk, year before married	0.32		0	1
Wife had school within 5 minute walk, year before married	0.33		0	1
Education				
Husband's years of schooling, before married	5.77	5.40	0	22
Wife's years of schooling, before married	2.96	4.47	0	20
Controls				
Wealth measures				
Family owns land	0.86		0	1
Number of livestock own	4.19		0	41
Number of consumer durables own	1.75		0	8
Number of stories in house	1.58		1	5
Cohort <sup>a</sup>				
Born 1919-1972 (age 17-24)	0.07		0	1
Born 1971-1962 (age 25-34)	0.31		0	1
Born 1961-1952 (age 35-44)	0.27		0	1
Born 1951-1942 (age 45-54)	0.28		0	1
Born 1941 or after (55+)	0.15		0	1
Ethnicity <sup>b</sup>				
High Caste Hindu	0.47		0	1
Low Caste Hindu	0.12		0	1
Newar	0.12		0	1
Hill Tibeto-burmese	0.00		0	1
Terai Tibeto-burmese	0.18		0	1
Wife is of different ethnicity	0.03		0	1
Has more than one wife	0.02		0	1
Total number of kids born	3.94		0 0	15
Parental characteristics			, e	
Husband's father ever went to school	0.17		0	1
Husband's father ever worked outside the family for pay	0.43		0	1
Husband's mother's children ever born.	5.77		1	16
Wife's father ever went to school	0.26		0	1
Wife's father ever worked outside the family for pay.	0.41		0	1
Wife's mother's children ever born.	6.13		1	18
Community characteristics year before married				-
Husband's community index	0.80	1.21	0	5
Wife's community index	0.84	1.24	Õ	5
Non-family experiences year before married				-
Husband worked for pay	0.53	0.50	0	1
Wife worked for pay	0.20	0.40	0	1
	0.20	0.10	0	-

Note: N=1,496 couples.

	Support eithe wife's	r husband's or parents	Support husand's parents		Support wife's parents	
	1	2	3	4	5	6
Schools						
Education						
Husband's years of schooling before married	1.06***		1.07***		1.01	
These and a years of sensoring, before married	(3.32)		(4.14)		(0.66)	
Wife's years of schooling, before married		1.02		1.02		1.02
		(1.09)		(1.27)		(1.30)
Controls Wealth measures						
wealth measures	0.57*	0.60*	0.68*	0.73+	1.00	1.01
Family owns land	(-2,5)	(-2.31)	(-1.97)	(-1.68)	(0.02)	(0.07)
	1.01	1.01	0.99	1.00	0.98	0.98
Number of livestock own	(0.32)	(0.38)	(-0.26)	(-0.17)	(-1.40)	(-1.39)
	1.08	1.10+	1.01	1.03	1.07	1.06
Number of consumer durables own	(1.29)	(1.65)	(0.13)	(0.59)	(1.36)	(1.24)
	1.02	1.01	1.23+	1.21+	0.99	0.99
Number of stories in house	(0.14)	(0.05)	(1.85)	(1.71)	(-0.12)	(-0.14)
Cohort <sup>a</sup>						
$P_{am} = 1070 + 1072 (am 17, 24)$	1.45	1.91	1.24	1.71	0.60	0.58
Dom 1979-1972 (age 17-24)	(0.83)	(1.47)	(0.55)	(1.43)	(-1.38)	(-1.48)
Born 1971-1962 (age 25-34)	1.10	1.50	1.35	1.93*	0.48*	0.47**
Dom 1771-1902 (age 25-54)	(0.28)	(1.22)	(0.98)	(2.26)	(-2.44)	(-2.58)
Born 1961-1952 (age 35-44)	0.96	1.22	1.10	1.46	0.72	0.74
2011 1901 1902 (age ee 11)	(-0.12)	(0.67)	(0.36)	(1.46)	(-1.19)	(-1.14)
Born 1951-1942 (age 45-55)	0.75	0.84	0.84	0.96	0.76	0.77
h	(-1.05)	(-0.67)	(-0.72)	(-0.18)	(-1.13)	(-1.07)
Ethnicity	0.40111	0.44444	0.40			0.444
Low Caste Hindu	0.48***	0.44***	0.68+	0.61*	0.60*	0.61*
	(-3.39)	(-3.79)	(-1.86)	(-2.38)	(-2.34)	(-2.28)
Newar	1.08	(0.29)	1.00	(0.02)	(0.99)	1.00
Hill Tibeto-burmese	0.84	(0.23)	0.81	(0.02)	(-0.04)	(0)
	(-0.93)	(-1.12)	(-1.16)	(-1.36)	(0.83)	(0.94)
	1.03	0.89	0.99	0.85	1.72**	1.76**
Terai Tibeto-burmese	(0.15)	(-0.56)	(-0.06)	(-0.85)	(3.08)	(3.25)
	0.79	0.73	0.96	0.89	0.92	0.91
Wife is of different ethnicity	(-0.64)	(-0.86)	(-0.11)	(-0.34)	(-0.24)	(-0.28)
Has more than one wife	5.87*	6.29*	2.39*	2.51*	3.02**	3.02**
Has more than one whe	(2.35)	(2.45)	(2.04)	(2.16)	(3.03)	(3.02)
Total number of kids born	1.02	1.02	1.00	1.00	0.98	0.99
	(0.67)	(0.58)	(-0.05)	(-0.13)	(-0.58)	(-0.47)
Parental characterstics						
Husband's father ever went to school	0.72	0.80	0.88	0.98	0.71*	0.70*
	(-1.64)	(-1.14)	(-0.74)	(-0.13)	(-1.99)	(-2.08)
Husband's father ever worked outside the family for pay.	1.35*	1.34*	1.26+	1.20+	1.06	1.08
	(2.14)	(2.13)	(1.92)	(1.89)	(0.33)	(0.62)
Husband's mother's children ever born.	(0.08)	(0.21)	(1.03	(1.05)	(0.01)	(0.07)
	(0.08)	(0.21)	(1.03)	(1.23)	0.99	(0.07)
Wife's father ever went to school	(-0.19)	(0.14)	(-0.51)	(-0.09)	(-0.05)	(-0.19)
	1.47**	1.44**	1.19	1.16	1.44**	1.42**
Wife's father ever worked outside the family for pay.	(2.72)	(2.58)	(1.41)	(1.22)	(3.02)	(2.96)
	1.05*	1.06*	1.03	1.03	1.04+	1.04+
whe's mother's children ever born.	(2.12)	(2.24)	(1.43)	(1.54)	(1.68)	(1.77)

(cont.)

## Table 2. Estimate From Multilevel Logistic Regressions: The Relationship Between Schooling and Couple's Support of Their Parents (Continued)

	Support eithe wife's j	r husband's or parents	Support husand's parents		Support wife's parents	
	1	2	3	4	5	6
Community characteristics year before married						
Husband	0.87 (-0.76)	0.89 (-0.65)	0.97 (-0.17)	1.00 (-0.03)	0.92 (-0.53)	0.92 (-0.53)
Wife	1.10 (0.52)	1.09 (0.51)	0.99 (-0.08)	0.99 (-0.07)	1.15 (0.87)	1.14 (0.84)
Non-family experiences year before married						
Husband	1.32* (2.05)	1.30+ (1.91)	1.27+ (1.93)	1.24+ (1.76)	1.01 (0.08)	1.00 (-0.01)
Wife	0.95 (-0.28)	0.93 (-0.40)	0.99 (-0.07)	0.97 (-0.21)	1.12 (0.77)	1.13 (0.80)
ICC	0.02	0.04	0.17	0.19	0.044	0.045
Deviance	1518	1518	1714	1724	1850	1848
Ν	1496	1496	1496	1496	1496	1496

Note: Estimates are presented as odds ratios, with z-statistics in parentheses.

<sup>a</sup>Reference group is born after 1941 (age 55 and over).

<sup>b</sup>Refernce group is High Caste Hindu.

+ P < .10, two tailed test; \* P < .05, two tailed test; \*\* P < .01, two tailed test; \*\*\* P < .001, two tailed test

Table 3. Estimate From Multilevel Logistic Regressions: The Relationship Between Exposure to Schools and Couple's Support of Their Parents

	Support eitne wife's	Support either husband's or wife's parents		Support husand's parents		Support wife's parents	
	1	2	3	4	5	6	
Schools							
Exposure to schools							
Husband had school within 5 minute walk, year before	1.02		1.13		0.76*		
married	(0.13)		(0.84)		(-2.03)		
Wife had school within 5 minute walk, year before		1.14		1.23		0.76*	
married		(0.89)		(1.42)		(-2.04)	
Controls							
Wealth measures							
Family owns land	0.60*	0.59*	0.73+	0.72+	1.02	1.03	
	(-2.3)	(-2.34)	(-1.68)	(-1.73)	(0.13)	(0.19)	
Number of livestock own	1.01	1.01	1.00	1.00	0.98	0.98	
	(0.36)	(0.35)	(-0.21)	(-0.21)	(-1.32)	(-1.34)	
Number of consumer durables own	1.11 +	1.11+	1.04	1.04	1.07	1.07	
	(1.86)	(1.89)	(0.86)	(0.90)	(1.38)	(1.37)	
Number of stories in house	1.01	1.01	1.22+	1.22+	0.98	0.98	
	(0.07)	(0.08)	(1.74)	(1.75)	(-0.24)	(-0.24)	
Cohort <sup>a</sup>							
Born 1979-1972 (age 17-24)	2.08+	2.06+	1.83	1.82	0.67	0.66	
2011 1717 1712 (ugo 17 21)	(1.69)	(1.67)	(1.64)	(1.63)	(-1.10)	(-1.15)	
Born 1971-1962 (age 25-34)	1.61	1.59	2.04*	2.03*	0.54*	0.53*	
	(1.47)	(1.43)	(2.49)	(2.49)	(-2.15)	(-2.23)	
Born 1961-1952 (age 35-44)	1.25	1.23	1.46	1.45	0.81	0.79	
	(0.73)	(0.69)	(1.44)	(1.42)	(-0.82)	(-0.89)	
Born 1951-1942 (age 45-55)	0.84	0.83	0.95	0.95	0.80	0.79	
	(-0.66)	(-0.69)	(-0.23)	(-0.23)	(-0.91)	(-0.97)	
Ethnicity <sup>b</sup>							
Low Caste Hindu	0.43***	0.43***	0.59*	0.59*	0.58*	0.58*	
	(-3.99)	(-3.96)	(-2.56)	(-2.54)	(-2.56)	(-2.57)	
Newar	1.08	1.09	1.00	1.01	0.98	0.97	
	(0.24)	(0.27)	(-0.02)	(0.02)	(-0.08)	(-0.11)	
Hill Tibeto-burmese	0.79	0.79	0.77	0.78	1.11	1.11	
	(-1.26)	(-1.23)	(-1.48)	(-1.45)	(0.65)	(0.65)	
Terai Tibeto-burmese	0.85	0.85	0.8	0.8	1.66**	1.66**	
	(-0.84)	(-0.85)	(-1.17)	(-1.16)	(3.03)	(3.02)	
Wife is of different ethnicity	0.74	0.74	0.90	0.90	0.90	0.91	
······	(-0.85)	(-0.84)	(-0.33)	(-0.34)	(-0.32)	(-0.29)	
Has more than one wife	6.38*	6.37*	2.55*	2.55*	3.06**	3.07**	
	(2.46)	(2.46)	(2.19)	(2.19)	(3.05)	(3.06)	
Total number of kids born	1.02	1.02	0.99	0.99	0.98	0.98	
	(0.50)	(0.50)	(-0.22)	(-0.24)	(-0.65)	(-0.63)	
Parental characterstics							
Husband's father ever went to school	0.83	0.82	1.01	1.01	0.73+	0.73+	
	(-0.98)	(-0.99)	(0.08)	(0.07)	(-1.90)	(-1.89)	
Husband's father ever worked outside the family for pay	1.33*	1.33*	1.24+	1.25+	1.05	1.05	
	(2.05)	(2.06)	(1.81)	(1.82)	(0.45)	(0.45)	
Husband's mother's children ever born.	1.00	1.00	1.03	1.03	1.00	1.00	
	(0.18)	(0.16)	(1.20)	(1.18)	(0.09)	(0.10)	
Wife's father ever went to school	1.06	1.06	1.02	1.02	1.02	1.02	
	(0.37)	(0.35)	(0.15)	(0.13)	(0.11)	(0.12)	
Wife's father ever worked outside the family for pay.	1.45**	1.45**	1.17	1.18	1.41**	1.41**	
	(2.62)	(2.66)	(1.31)	(1.34)	(2.85)	(2.86)	
Wife's mother's children ever born	1.05*	1.05*	1.03	1.03	1.04+	1.04+	
	(110)	(7) 17)	(1 47)	(1 40)	(1.71)	(1, 70)	

# Table 3. Estimate From Multilevel Logistic Regressions: The Relationship Between Exposure to Schools and Couple's Support of Their Parents (continued)

	Support eithe wife's	r husband's or parents	Support husand's parents		Support wife's parents	
	1	2	3	4	5	6
Community characteristics year before married						
	0.89	0.89	0.99	1.00	0.95	0.92
Husband's community index	(-0.64)	(-0.64)	(-0.08)	(-0.01)	(-0.32)	(-0.49)
Wife's community index	1.10	1.09	1.00	0.97	1.15	1.19
	(0.55)	(0.47)	(-0.03)	(-0.17)	(0.90)	(1.06)
Non-family experiences year before married						
	1.31*	1.31*	1.25 +	1.25 +	1.01	1.01
Husbalid worked for pay	(1.99)	(1.98)	(1.83)	(1.82)	(0.08)	(0.09)
Wife worked for pay	0.92	0.92	0.96	0.95	1.12	1.13
	(-0.47)	(-0.50)	(-0.28)	(-0.33)	(0.75)	(0.80)
ICC	0.04	0.04	0.18	0.18	0.044	0.044
Deviance	1520	1520	1727	1726	1846	1846
N	1496	1496	1496	1496	1496	1496

Note: Estimates are presented as odds ratios, with z-statistics in parentheses.

<sup>a</sup>Reference group is born after 1941 (age 55 and over).

<sup>b</sup>Refernce group is High Caste Hindu.

+ P < .10, two tailed test; \* P < .05, two tailed test; \*\* P < .01, two tailed test; \*\*\* P < .001, two tailed test