

**The Measurement and Prevalence of Developmental Thinking about the Family:
Evidence from Nepal***

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Abstract

We argue that many ideational factors identified by scholars as influences on social change emanate from the developmental paradigm and developmental idealism. Using data collected in Nepal in 2003, we provide a first examination of the knowledge and beliefs of ordinary people about the ideas of development and modernity, as well as how they use these ideas to evaluate their society. This study confirms our ability to measure the complex concepts of development in a survey conducted with a broad spectrum of people. There is also evidence that developmental thinking has been disseminated and endorsed widely in Nepal. This evidence is consistent with the expectation that developmental thinking has been highly influential in shaping people's beliefs, values, and behaviors around the world.

Social scientists have offered many explanations for family and demographic changes in both the western and non-western parts of the world (Bumpass 1990; Cherlin 1992; Chesnais 1992; Goldin and Katz 2000; Goode [1963]1970; Lesthaeghe and Neels 2002; van de Kaa 1996). For the most part, these explanations have emphasized changes in the economic, social, and political structures. Foremost has been the restructuring of societies through industrialization, urbanization, and increases in education and consumption. Other common explanations include changes in science and technology, with emphasis on more rapid transportation and communication networks, more effective contraceptives, and medical and public health innovations.

Although structural explanations have predominated as explanations of family change, recent critiques have emphasized the failure of such structural models alone to explain trends in family and demographic behaviors and have called for the inclusion of ideational factors as imperative parts of the explanations (Caldwell 1982; Chesnais 1992; Cleland and Wilson 1987; Knodel and van de Walle 1979; Mason 1997). A range of interrelated ideational forces has been offered as factors explaining family and demographic change. However, because of complex measurement challenges, studies of ideational influences are still quite limited.

Many of the ideational factors identified by scholars as important influences on family and demographic change emanate from the developmental paradigm and developmental idealism. That is, the ideas of progress, societal development, and modernity are, in many respects, responsible for the ideational forces influencing family and demographic change. As Thornton (2001, 2005) has argued, the ideas of development, progress, and modernity have been disseminated widely around the world and have affected the family and demographic beliefs, values, motivations, and behavior of scholars, policy makers and ordinary people. Although there is extensive evidence about the dissemination of developmental models around the world, much of this evidence comes from the writings of social, economic, and political elites. The purpose of this paper, however, concerns the knowledge and beliefs of ordinary people. We ask the extent that ordinary people understand and believe the ideas of development and modernity, and use these ideas in evaluating the world around them.

Our paper has three main parts. First, we describe how many of the ideational forces identified in the literature are related to the larger models of development and modernity. Second, we examine theoretical and methodological issues associated with measuring developmental thinking. Third, we evaluate the extent that the interrelated ideas of societal development, progress, and modernity are understood and believed within one population in Nepal. In this

paper we demonstrate that developmental thinking can be measured in surveys, and, that developmental models are widely understood and believed in Nepal.

IDEATIONAL INFLUENCES

As explained by Geertz, beliefs and ideas provide models for both understanding reality and for dealing with the world (Geertz 1973; also see Fricke 1997a, 1997b, and D'Andrade 1984). Ideational frameworks help to describe, understand, and explain the world, outlining the significance of specific behaviors and institutions for defining and shaping social structures and relationships. They also identify what is important and good in life and what methods are appropriate for achieving desired goals. In this way, these models specify a framework detailing what is acceptable and moral, and they help to establish motivations for actors within a common context. There are important competing ideational models held by ordinary individuals, and holding one model as opposed to another can have important implications for family and demographic behavior.

Although the importance of ideational influences in human behavior has been recognized for a long time (see for example Weber [1904-5]1958), we begin with Goode ([1963]1970) who offers both structural and ideational explanations of worldwide family change. He identifies the conjugal family becoming preferred over the extended family as especially important for family changes. Lesthaeghe and his colleagues have argued that changes in religiosity and secularism have been substantial forces for fertility decline (Lesthaeghe 1983; Lesthaeghe and Wilson 1986). They believe that increasing emphasis on egalitarianism, individualism, and individual freedom are important forces for fertility change (Lesthaeghe 1980, 1983; Lesthaeghe and Surkyn 1988; Lesthaeghe and Wilson 1986). Both Freedman (1979, 1987) and Pritchett (1994) argued that declining family size preferences played a significant role in the decline in fertility around the world.

Some scholars emphasize the importance of the spread of Western ideas and beliefs for changes in family and demographic behavior in non-western populations (Caldwell 1982; Freedman 1979, 1987; van de Kaa 2001). Included within this package of Western ideas are such things as a preference for small families, older ages at marriage, youthful autonomy, egalitarianism, and individual autonomy. Many of these Western ideas are closely related to the ideas described by Inglehart and colleagues as secular-rational and self expression values, which include: individual autonomy, egalitarianism, and independence of thought (Inglehart 1997; Inglehart and Baker 2000; Inglehart, Norris, and Welzel 2003). Also, increased aspirations for consumption and education have been posited as important influences on family and fertility change (Easterlin 1980; Freedman 1979, 1987; Thornton and Lin 1994). Bista (1991) argues that

the lack of commitment to individual control and autonomy—a condition that he calls fatalism—limits social change.

Lesthaeghe, van de Kaa and their colleagues have identified a range of values as crucial for explaining the emergence of new patterns of delayed marriage and childbearing, high divorce, and high levels of nonmarital cohabitation and childbearing. This revolution in family forms first occurred in Western Europe and North America, then emerged in Southern and Eastern Europe, and now appears poised to appear in other parts of the world (Lesthaeghe and Neels 2002; Lesthaeghe and Neidert 2006; Lesthaeghe and Surkyn 2004; Lesthaeghe and van de Kaa 1986; van de Kaa 1987). In explaining these changes in union formation and reproduction, these scholars identify as important the continued decline of religion and the secularization of the population. They also build on the work of Inglehart in suggesting the importance of high levels of secular-rational and self-expression values, distrust of institutions, and anti-authoritarianism. Also important in their explanations are increased emphasis on egalitarianism, individualism, and free choice.

Developmental Models

In another stream of theorizing, Thornton (2001, 2005) argues that a package of ideas he calls developmental idealism was disseminated widely around the world where it has been a major force for family and demographic change. The elements of developmental idealism can be defined broadly to include most of the ideational factors posited in the literature as being important influences on family and demographic behavior. Developmental idealism directly incorporates into its elements the Western and modern values and beliefs that are used either directly or indirectly in most of the ideational literature explaining family and demographic change. It also adds something that is missing from the literature—a reason why the non-Western world would care about, and be influenced by, Western and/or modern ideas. It also brings into the picture such ideational forces as the desire for a higher standard of living, desires for freedom and equality, an emphasis on individual agency rather than fatalism, individualism, skepticism about authority and institutions, the empowerment of women and the younger generation, and desires for small families, mature marriage, and acceptance of fertility control.

In this section we highlight the basic ideas underlying societal developmental models and explain how they provide important schema for understanding and dealing with the world, including family structure and relationships. A more comprehensive discussion of these central themes of developmental thinking is provided elsewhere (Thornton 2001, 2005).

We begin with the developmental paradigm, a model of social change that has dominated much of Western thinking from the Enlightenment of the 1600s and 1700s to the present. This

paradigm suggests that all societies progress through the same natural, universal, and necessary stages of development (Sanderson 1990; Smith 1973). The speed of advancement was believed to vary so that at any one point in time societies at different developmental levels could be observed. Scholars using this paradigm believed that the most advanced societies were in northwest Europe and the northwest European diaspora, while other societies occupied less advanced positions of development.

These scholars also observed that, in general, the social and economic systems of northwest Europe were different from those in many other parts of the world. They observed that northwest Europe was more industrial, urban, and educated than many other parts of the world; it also had higher levels of consumption, geographic mobility, secularism, and democracy. These scholars labeled societies outside of Europe with such terms as backward, developing, or traditional and the societies of northwest Europe as modern, developed, or civilized. The process linking the societies outside of Europe identified as traditional to the northwest European societies identified as developed was modernization or development itself.

These scholars also observed that the family systems of northwest Europe were different than those in many other parts of the world (Thornton 2001, 2005). Although there was considerable heterogeneity outside of northwest Europe, the scholars of the era observed that, compared to northwest Europe, other societies could generally be characterized as family-organized, as having considerable family solidarity, and as extended. Marriage was frequently universal and often contracted at a young age, and, these societies had considerable authority in the hands of parents and the elders, arranged marriages, and little opportunity for affection before marriage. They also had gender relationships that the scholars of the day interpreted as reflecting the low status of women. Northwest European societies were observed to be less family organized, more individualistic, and to have less parental authority and weaker intergenerational support systems. They also had more nuclear households, less universal marriage, older marriage, and more affection and couple autonomy in the mate selection process. Scholars also perceived women's status as higher in northwest Europe.

With the developmental paradigm and the use of cross-national data to infer historical trajectories, it was easy for generations of scholars to conclude that the process of development transformed family systems from the traditional patterns observed outside of northwest Europe to the developed patterns within northwest Europe (Thornton 2001, 2005). They believed that sometime before they wrote in the late 1700s and 1800s, there had been a great family transition that had changed European families from being like those outside of northwest Europe to being like the families of northwest Europe. These scholars made the inference that the unique

northwest European family system was causally connected to the northwest European social and economic system. Most saw this causation as being the influence of socioeconomic development on family change, but others hypothesized an effect of family change on socioeconomic development. These ideas and conclusions permeated the scholarly literature from the late 1700s through the middle 1900s.

Thornton (2001, 2005) argues that developmental thinking and methodology and the conclusions of several generations of scholars about family change created a set of propositions that have been a force for family change during the last two centuries. These developmental models and their conclusions provided new rubrics for judging society, family life, and the rights of human beings. They showed the direction for future change and the mechanisms that people should employ to facilitate progress, and in this way became the engine for many social, economic, and familial changes. More specifically, this set of four interrelated propositions, which we call developmental idealism, states that: 1) a modern society that is industrialized, urbanized, highly educated, and with high levels of technology is good and to be sought after; 2) modern families, defined as having high levels of individualism, high status of women, mature marriage, marriage arranged by the couple, high youth-autonomy, small households, and controlled and low fertility are preferred family types; 3) modern society and modern family are causally connected, with a modern society being a cause and effect of a modern family system; and 4) individuals have the right to be free and equal.

Thornton (2001, 2005) argues that developmental idealism was disseminated widely around the world—through a myriad of mechanisms such as scholarly publications, Christianity, political movements, US foreign policy programs, and the United Nations—and has been an exceptionally powerful force for family change during the 1800s and 1900s. He argues that it has been a particularly important force in many family changes during this period, including declines in childbearing and increases in age at marriage, the autonomy of young people, egalitarianism, divorce, independent living, sexual activity and cohabitation outside marriage, and growing emphasis on individual rights.

This model of developmental idealism integrates most of the ideational factors contained in the research literature concerning ideational forces on family and demographic behavior and change. Developmental idealism can add enormously to indigenous material aspirations by increasing the number of things to be attained, by declaring more things attainable, and by giving a western model for achieving those things. So, while material aspirations can and do exist outside of developmental idealism, they are enhanced and channeled in specific ways by the developmental model. The ideas of freedom and equality did not originate with the

developmental thinking of the 1600s and 1700s, but existed long before that and can exist independent of developmental idealism. However, the growing strength of the ideas of development from the 1700s onward provided further support for the principles of freedom and equality, and helped fuel the adoption of these principles in many places around the world. It also brings into the picture such ideational forces as the quest for the western and/or modern, the desire for a higher standard of living, an emphasis on individual agency, expressive individualism, skepticism about authority and institutions, the empowerment of women and the younger generation, and desires for small families, mature marriage, and fertility control.

Existing Evidence about the Dissemination of Developmental Models

Several studies have shown that developmental models have dominated social science thinking for most of the past quarter millennium (Harris 1968; Mandelbaum 1971; Nisbet 1969; Sanderson 1990; Thornton 2001, 2005). It is only in the last few decades that the developmental or modernization paradigm has been strongly challenged—and even discredited—and many of the conclusions of the generations of scholars shown to be myths. It has also been documented that European travelers, colonial administrators, leaders of the feminist movement, and family planning advocates have relied heavily on developmental arguments. In addition, the role of developmental models has been important in the documents of the United Nations, numerous governments, including those of China and the United States, and international nongovernmental organizations (Latham 2000; Meyer et al. 1997; Nisbet 1980; UNDP 2001, 2002; United Nations 1948, 1962, 1979).

There are also limited data from ordinary people consistent with the idea that developmental thinking is both widespread and influential. Observers in Africa, India, China, Nepal, and New Guinea have reported examples of ordinary people using the developmental framework in evaluating various attributes and behavior (Ahearn 2001; Amin 1989; Blaut 1993; Caldwell et al. 1988; Dahl and Rabo 1992; Pigg 1992; Wang 1999). In Nepal, Pigg (1992) and Ahearn (2001) use ethnographic data to show that in some rural areas of Nepal, people use developmental thinking to compare urban and rural life and to think about marriage and other aspects of family life. However, there is little survey data available demonstrating the overall prevalence of developmental beliefs in the general population. This paper is among the first to conceptualize and measure developmental thinking and models in a general survey. We now turn to a discussion of the conceptual and measurement issues involved in such research.

CONCEPTUAL AND MEASUREMENT ISSUES

Although individual's ideas, values and attitudes have long been hypothesized to influence individuals' preferences and behaviors (Caldwell 1982; Inglehart 1997; Lesthaeghe

1980), studies of ideational influences on individual behavior still struggle with important theoretical and methodological challenges. On the theoretical side, conceptualizing complex concepts, such as modernity, individualism, and nucleation has been a major challenge. Often, theories of ideational influence take complex constructs from western thought and apply them to nonwestern cultural settings that may or may not have similar cultural constructs. And even when the constructs are similar across societies, there remains extensive of variation in individuals' understanding.

The creation of appropriate measures for these complex concepts has major obstacles. The largest obstacle is translating, or operationalizing, a complex and highly abstract concept into concrete indicators. This difficulty has seriously limited our ability to evaluate ideational influences on individual behavior.

We have made great effort to understand how the concepts related to developmental thinking are understood, internalized and used in daily discourse in Nepal. We used the ethnographic work by a number of scholars (Ahearn 2001; Fricke 1988, 1997a; Gunaratne 1997, 2001; and Pigg 1992, 1996), and by our research staff, over a extended period of time, to understand how the concept of development, *bikas* in Nepali, is defined and used to evaluate daily activities in this setting. We also used informal discussions, semi-structured interviews, and focus groups in Nepal to explicate how individuals think about social development. Then we broke the complex ideas of development down into their most simple and concrete components and asked people in a survey of their knowledge and beliefs concerning each component. In addition, because the ideas of societal development require a basic understanding of the world, we asked respondents to compare circumstances in Nepal and the United States and to rate several countries on their levels of education and development.

We use several criteria to evaluate knowledge and beliefs concerning societal development and modernity in Nepal. These include the extent to which Nepalis are able to discuss societal development in in-depth interviews and focus groups and their willingness and ability to answer survey questions relevant to development. We also evaluate the knowledge that Nepalis have of the international community and their ability to use developmental concepts in evaluating various countries. We also investigate the extent to which respondent answers are consistent with the predictions made by developmental thinking

NEPAL AS A RESEARCH SITE

There are several considerations that make Nepal an especially appropriate location for the study of knowledge and beliefs concerning developmental models. Nepal was kept in isolation from rest of the world until the 1950s (Adhikari 1998). The historical isolation, extreme exploitation by the ruling elite, the Hinduization of the non-Hindu population, and the rugged Himalayan topography with few roads and communication resources have had an enduring influence on many aspects of Nepali life. Nepal currently ranks as one of the poorest countries in the world. Over 85 percent of the population still lives in rural areas with no all-weather roads poor public education, few health services and limited communication technology. More than half of the population is still illiterate. In addition, several attributes of the family that are labeled by developmental idealism as traditional have historically characterized Nepal and are still common. These include extended households, early age at marriage, arranged marriage, parental control over children, and low status of women.

Our research was conducted in Chitwan Valley, which lies in the south central part of Nepal. In 1955, the Nepalese government opened this valley for settlement, prior to this it was covered with dense tropical forest. Chitwan, once a “Death Valley,” soon became a “melting pot,” receiving migrants from all over the country. The valley has become connected to the rest of the country by all-weather roads, making it a business hub for the country. Furthermore, there has been a massive expansion of schools, health services, markets, bus services, cooperatives, and employment centers in Chitwan (Axinn & Yabiku, 2001). Previous work in Chitwan shows that there has been a sharp increase in school enrollment, visits to health clinics, employment outside of the home, and exposure to different sources of mass media and new ideas in recent birth cohorts (Axinn & Barber, 2001; Axinn & Yabiku, 2001; Ghimire et al., 2006).

DATA AND METHODS

The developmental paradigm and developmental idealism are very complex concepts, which led us to use a multi-method approach in our study. We conducted a total of 12 in-depth interviews and 10 focus groups with individuals representing different ethnic groups, genders and ages. We used the information from our conceptual understanding of developmental models and the insights we gained from the in-depth interviews and focus groups to construct individual questionnaire items. One key strategy guiding our construction of questions was to break the complex propositions of developmental idealism into their component parts using concepts and language that were understandable by ordinary Nepalis. Thus, most of the questions we constructed did not include the general abstract concepts of development. Instead, we focused most of our attention on family matters that were very familiar to Nepalis such as marriage, living arrangements, parent-child relations, childbearing, and contraception. Similarly, we focused our

questions about socioeconomic structures on such familiar concepts as education, employment, wealth, residence, and mortality. For a few questions we asked directly about development, or *bikas* in Nepali, because we wanted to ascertain the extent that Nepalis were familiar with the concept

Sample Design

The survey was conducted with 537 people aged 17 and above living in the Western Chitwan Valley. These people were chosen using the following strategy. First, based on the distance from the primary urban center within the Chitwan Valley, the study area was divided into five distinct strata. Second, a sample of 2-4 neighborhoods, consisting of 4-25 households from each stratum, was selected. Finally, once a neighborhood was selected, all the individuals age 17 and above residing in those neighborhoods were interviewed. This sampling procedure resulted in slightly more than 100 individuals being selected from each of the five strata. These people were interviewed in face-to-face interviews in the Nepali language using paper and pencil format. Three respondents who could not be interviewed in Nepali were excluded from our analysis. The field period lasted for six weeks and resulted in a 97 percent response rate.

Measures

The survey questionnaire included 26 sections, but in this paper we focus our attention only on the six sections of questions (from 5-20 questions in each section) most relevant for investigating knowledge and belief in the developmental paradigm and its application in concrete situations. These are questions that measure knowledge of several countries of the world, knowledge of the developmental hierarchy, and the ability to rank countries in the developmental hierarchy.

More specifically, four of the sections in the survey presented a characteristic (e.g. marrying at older ages) and then asked if this characteristic is more common in different places or types of societies. The location comparisons in the four sections were: 1) U.S. versus Nepal; 2) rich versus poor places; 3) developed versus traditional places; and 4) educated versus uneducated places. The respondents could specify that a characteristic was more common in one location (e.g. the U.S.) or in the other location (e.g. Nepal) or that it was equally common in both. “Don’t know” was not given as a response, but such answers were accepted after a follow up probe asking the respondent to give their best guess or estimate.

Another set of questions began with the following introduction: “Now we would like you to consider how educated different places in the world are. Here is a scale of education—with the least educated place in the world being here at number 0 and the most educated place in the world being here at number 10. And, moderately educated places here in the middle at number 5.” The

respondents were then asked to rate Nepal, Japan, India, U.S., Somalia, China, England and Brazil on the scale. If respondents reported that they did not know the score, interviewer probed for a “best guess” for that country. Later in the survey we asked similar questions about the development of the same countries.

In order to have an external criterion to compare with the answers of Nepali respondents about the ratings of countries by education and development we used the indices of education and development created by the United Nations for the same eight countries¹ (United Nations Development Program 2001, 2003). Both indices come from the 2003 Human Development Report (UNDP 2003), which contains the 2001 calculations of the Human Development and Education Indices. The international education index is comprised of measures of national adult literacy (% of population over age 15 who are literate) and the combined primary, secondary and tertiary gross enrollment ratio. The human development index is calculated using the education index, life expectancy at birth, and the GDP per capita of the country. The scores for both indices can theoretically range from 0 to 1, but actually range from .16 to .99 for education and .275 to .94 for development.

Analysis Strategies

We utilize several criteria for evaluating whether people in the Chitwan Valley understand and believe the ideas of the developmental paradigm. Our first criterion focuses on people’s ability to use and apply developmental concepts in their discussions. This was evaluated qualitatively using the in-depth interviews and focus group interviews. In addition, we hypothesized that a lack of understanding and knowledge of developmental thinking in the survey would be revealed in respondents becoming frustrated, terminating the survey early, refusing to answer questions, responding that they do not know the answers, and providing answers that do not appear to be related to the questions. Thus, we consider the comments of the interviewers and respondents concerning the interview and examine the amount and type of item missing data, including terminating the survey early. Having positive comments and little missing data provides some evidence respondents understand the concepts being measured.

Second, we checked for patterns of acquiescence in the data. For example if respondents learn that for each “don’t know” answer provided there is a probe, they may begin to respond without really listening to and thinking about the questions. This may be reflected in respondents saying that every attribute is more common in the United States than in Nepal or in rich places versus poor places. We checked for this kind of acquiescence by examining whether respondents distinguished between items that were more common, as suggested by developmental idealism, in one place and items that were more common in the different place.²

Third, we compared the answers of our survey respondents with external criteria provided by knowledge of actual country comparisons (Nepal versus the United States) and by comparing respondent ratings of countries on education and development with the United Nations' ratings of the same countries on education and development. We posit that a high level of international knowledge and understanding of developmental models and concepts will be reflected in a high degree of correspondence between respondent answers and these external criteria. For example, respondents who rate the development levels of countries similarly to the United Nations development ratings must both have considerable knowledge of the eight countries and understanding of developmental models. The correspondence of respondent ratings of educational levels in countries could reflect a high level of knowledge of the educational systems of different countries. Alternatively, respondents may rate educational levels of countries similarly to the United Nations if they both have a general development score for each country and also understand the relationship of education and development.

We evaluate the correspondence between Nepali respondents and the external criteria by estimating the fraction of Nepali respondents who provide the predicted answers about the comparisons of Nepal and the United States on a series of social, economic, and family relationships. Similarly, we estimate the fraction of respondents who believe that levels of education, wealth, and development in societies are associated with a range of family attributes. We also document knowledge and application of the developmental paradigm through our questions asking respondents to rate a series of countries on their levels of education and development. Here we compare both the individual and aggregate ratings of Nepalis concerning the education and development levels of countries with the ratings of these two socioeconomic dimensions provided by the United Nations, with the presumption that a distribution of answers similar to the ratings of the United Nations indicates great knowledge of the countries of the world and great ability to apply the concepts of development in everyday life.

RESULTS

Respondent Understanding and Rapport

--Table 1: Nepali Perceptions and Table 2: Mean Country Scores --

The survey response data provide the first evidence of good respondent comprehension. Despite a long, 70-minute average, and difficult interview—90% of the questions consisted of abstract ideational questions—97% of the sample responded to the survey. As well, no one terminated the interview early, and both respondents and interviewers provided positive comments about the interview experience. This implies that the topic and questions were at least reasonable enough that respondents not only finished the survey, but enjoyed it.

Further evidence of the acceptability of the questions is the low level of missing data. As seen in Table 1, item non-response for the questions asking respondents to compare attributes in various places ranges from 0.4% and 5.4%, and averages 1.6%. The missing data are the result of respondents reporting that they don't know, since only two uncodeable answers were given, and there were no refusals. The top panel of table 2 provides information about the missing data for the ratings of countries on development and education. In these questions we asked respondents to rate each of the 8 countries, and for respondents who did not answer the first query, we probed with a similar question. The data indicate the percentage of respondents providing a rating to the first or second query, or those providing no rating after two queries. With the exception of Somalia, more than 92% of respondents reported a country rating for education and 97% reported a development rating. After the probe, the percentage giving a rating for education and development rose to above 97% for each country (including Somalia) for both education and development. Clearly Somalia is the country people are most likely to report they do not know its level of education or development. Some of the respondents said they had not heard of the country, a fact that should not be surprising since Somalia is a small country without large-scale international recognition. What is more surprising is the willingness of such a large percentage of respondents to rate this country.

Note that there is a much smaller incidence of missing data for the development ratings compared to the education ratings. This could be due to two factors. First, the education questions came earlier in the survey than the development questions, and respondents could have learned from their experience with the education questions and been more efficient in answering the development questions. Second, it is possible that some respondents have crystallized their thinking about development more clearly than their ideas about education. The overall lack of missing data suggests a high degree of understanding of the concepts of education and development and their distributions across countries.

Acquiescence

The examination of acquiescence provides further evidence that the questions we asked are understandable and the answers meaningful. The low amount of missing data for the various questions may be due to respondents being agreeable to every question asked, without wondering if they could really answer the question. However, this pattern of acquiescence seems unlikely because we asked several similar questions in different directions to see if the respondents gave the same answers to questions measured in the opposite direction. The results indicate that they distinguish between the oppositely worded questions. For example, in the US/Nepal and developed/traditional society comparisons, respondents were asked in which location it was more

common to have marriages arranged by parents, while the Rich/Poor and Uneducated/Educated comparisons asked in which locations it is more common for young people to choose their spouse. Despite the directional difference of the question wording, a majority of respondents still chose the predicted outcome of linking young people control to the U.S. and living in developed, rich, and educated places. A similar result can be seen with the two age at marriage questions. Although the Nepal/U.S. comparison asked about the prevalence of child marriage and the other three sections asked about people marrying at older ages, all distributions suggest that age at marriage is positively associated with the U.S. and living in developed, rich, and educated places.

Another possible problem may be that respondents may only hear the first question in a series of questions and then respond with the same answer to each remaining question in that section. For example, a respondent might simply say that everything is more common in the United States than Nepal or that everything is more common in developed than traditional places. A review of the Nepal/U.S. and traditional/developed questions reveals that this did not happen for these series of questions. Instead, a substantial fraction of people reported that some things were more common in Nepal than in the U.S. while reporting that other things were more common in the U.S. The same is true for the traditional/developed comparisons. As we discuss more fully below, instead of providing careless responses, these response distributions generally follow the predicted direction (signified by the **bold**). It is important to note that the Traditional/Developed comparison was asked in the middle of the survey and the Nepal/US comparison was asked at the end of the survey, so there appears to be very little acquiescence even after the respondents had spent 40-60 minutes answering questions.

Correspondence with External Criteria

We now turn to the criteria of correspondence to external criteria, with the external criteria being set by either objective knowledge or by the results of developmental models. In Table 1 we report the results of questions asking respondents to report whether certain attributes are more common in some places than in others. We have indicated in **bold** the responses that we believe most closely correspond to the external criteria.

Turning to the questions asking respondents to compare basic elements of social, economic, and family life in Nepal and the United States, we find a striking correspondence between the understandings of Nepalis and the objective reality indicated empirically by the relative distribution of actual attributes in Nepal and the United States. The data in Table 1 suggest that most Nepali respondents know a substantial amount about the United States and how it compares with Nepal. The vast majority can properly evaluate the differences between the socioeconomic circumstances in Nepal and the United States. More specifically, between 84 and

95 percent report that cities, education, high incomes, and paid employment are higher in the United States while child mortality and farm employment are higher in Nepal.

Many of these Nepali respondents can also report very accurately about several dimensions of family life in Nepal and the United States. For example, 88 percent or more can report that polygamous families, activities organized around the family, marriages arranged by parents, and large families with many children are more common in Nepal than in the United States. Somewhat smaller percentages, but still between 74 and 84 percent, report that married sons living with their parents and child marriage are more common in Nepal while between 69 and 80 percent believe that personal freedom, women who never marry, and women having a high degree of respect are more common in the United States. Several, but not all, of the other family comparisons are in the predicted direction, but not as overwhelmingly split as those just mentioned.

Thus, this body of data suggests that most Nepalis have a substantial amount of information about the United States and can properly compare it with Nepal. They know that the two countries vary dramatically in terms of wealth, education, health, and wage employment. They also know that the two family systems differ dramatically. Another interpretation of these data is that they do not reflect objective knowledge of the U.S. compared to Nepal, but that Nepalis believe the U.S. is more developed than Nepal and that certain social, economic, and family attributes are associated with development.

The data in the other three sections confirm that the vast majority of Nepalis explicitly understand the correlation between family matters and various indicators of socioeconomic position, including wealth, development, and education. Between 64 and 93 percent of Nepalis report that people marrying at older ages, women getting treated with respect, married couples using contraception, and children living away from their older parents are more common in rich, developed, and educated places than in poor, traditional, and uneducated places. That over 90% report a positive correlation between education and women's status, spouse choice, and the use of contraception is quite remarkable. However, respondents are split on the correlation between divorce and wealth and education. Approximately half of them believe that the correlation is positive and half that it is negative.³

Interestingly, although respondents could have reported⁴ that the characteristics were equally common in either location, they rarely did so. In fact, for most questions only around 1% reported that the characteristic was not more common in either location. This suggests that although people may disagree about where things are more common, there is a belief that there are differences between the locations.

We now turn to the second panel of Table 2 where we report the mean education and development scores for each of the countries rated. We report results separately for respondents who answered the first question and respondents who answered only after a probe. Also listed in Table 2 are the education and development scores (multiplied by ten to create a similar metric), of the United Nations, an organization expending considerable resources to assess the education and development of the world's countries. The United Nations scores are listed here because they provide a criterion against which to compare the results of our survey.

Perusal of the middle panel of Table 2 reveals that the average scores for Nepalis are remarkably similar to the United Nations scores on both education and development. Because most respondents gave an answer without being probed, the first mean is roughly equal to the overall mean. The second mean for education and especially for development are very unstable, mostly due to the small cell size. Nevertheless, the results clearly show that respondents, as a group, do an impressive job of rating these countries on development and education, on average, rating them very similarly to the United Nations.

One interesting side note is that Brazil is very high on the education index provided by the UN and only moderate on the development index—but respondents, on average, gave Brazil similar scores for education and development. This may suggest that the Nepali respondents see education and development as highly related and may be rating Brazil's educational level more on their understanding of Brazil's level of development rather than on any precise knowledge of Brazil's education system.

As a summary measure of the correspondence of survey reported and UN reported development and education scores, we calculated Pearson correlation coefficients between the United Nations scores and the mean scores for the respondents. These correlations are reported separately in the bottom panel of Table 2 for those who responded without a probe and those that required a probe. The top row correlations are calculated using all 8 countries asked about in the survey, and the bottom row reports the correlations with Somalia removed from the analysis.

These results provide powerful evidence of the understanding of the developmental hierarchy. The correlation for all 8 countries for those who did not require a probe is .80 for education and .77 for development. When Somalia is removed, these correlations increase to .88 for education and nearly .90 for development. Clearly, as a group, the respondents matched the UN estimates of education and development quite well.

As expected, the respondents who said that they could not rate a particular country on education or development did not match the U.N. distributions as well as those who reported ratings after the first question. Nevertheless, even these respondents had substantial correlations

with the U.N. ratings, with those correlations being particularly high for development when Somalia is removed. This indicated that even when respondents profess ignorance of a country, their knowledge still bears some correspondence to the overall criteria provided by the U.N.

--Table 3: Bivariate Correlations --

Just as Pearson correlation coefficients can be computed between the aggregate scores of respondents and the United Nations, correlations can be computed between the scores of an individual and the scores of the United Nations. That is, one can calculate 537 correlations between each individual's score on country education and the United Nations education index. Another 537 correlations can be calculated between an individual's score on development and the UN development index.

We summarized the distributions of these correlations in Table 3 by showing the quartile breaks for the various correlations. Again, like the last panel in Table 2, we calculated correlations both with and without Somalia included and if the respondent needed a probe on any of the countries versus all respondents independent of needs for probes. Interestingly although the estimates have some variation, they are all quite similar. The correlations without Somalia and using only those who never required a probe on any of the countries are the highest. Because of the similarities we focus our attention primarily on the correlations without Somalia and for those who were not probed on any country.

Looking first at the individual correlations between Nepali respondents and the United Nations on education, we see that 25 percent of the respondents had correlations below 0.12, indicating a relatively low level of agreement of individuals with the UN. This low individual-level correlation is consistent with the fact that a significant number of Nepalis, 15 percent, gave Nepal a score of 10 on the education scale.⁵ Having such a rating for Nepal virtually guarantees a low overall correlation with the UN. It is not clear whether these respondents misunderstood the question or were using a different criterion of education than the UN. On the other hand, many respondents provided a relatively high correlation; over half had an education correlation with the UN greater than .57, and 25 percent had correlations of .8 or greater.

Note that the individual correlations between the Nepali scores on development and the relevant UN scores were generally higher than those for education. There are fewer very low correlations and more high correlations on development than on education. This suggests that the concept of development—and the distribution of countries on this scale—may be more salient in Nepal than is the concept of education for these particular countries.

The ability of most respondents in Nepal to perform relatively well on this evaluation task suggests at least three things. First, they were able to utilize our crude measurement devices

rather reliably. Second, they have a fairly sophisticated understanding and conception of development and education, which, despite language differences, match those of the UN, since they are able to utilize the constructs in very much the same way as the UN. Third, they have an understanding of some of the major countries of the world and are able to evaluate their levels of education and development. The simultaneous existence of all three of these characteristics is necessary to obtain such high correlations among so many of the respondents. Of course there is a group of respondents who fail on at least one of these characteristics. Identification of these people and why they are unable to replicate UN ratings is a task for further investigation—to expand both our methodological capabilities and to understand the substantive implications.

CONCLUSIONS

As we noted in the beginning of the paper, family change has been a common occurrence in many places around the world. Social scientists have accumulated a wide array of structural and ideational explanations of this worldwide family change. In this paper we focused our attention on one particular ideational force for changing family life—that of developmental idealism. We suggest that it has been disseminated widely around the world, where it has enormously influenced family behavior, beliefs, and values.

An important outcome of this study is its confirmation of our ability to measure the complex concepts of development in a survey conducted with a broad spectrum of people in Nepal. In addition to a very high response rate of 97 percent, most of the respondents eagerly participated in the study, and there were almost no refusals on individual survey items. Furthermore, respondents displayed a remarkable ability to answer the questions measuring knowledge and acceptance of developmental models. This is reflected in the fact that most Nepalis have considerable knowledge of the world, and understand development models and related concepts, and are able to provide information concerning their knowledge and beliefs. For example, most respondents answered questions about the correlation between family matters and various indicators of socioeconomic position, including wealth, development, and education.

This new evidence from Nepal supports our contention that developmental thinking has been disseminated widely around the world. As suggested by the ethnographic work of Pigg (1992) and Ahearn (2001), most people in our study are familiar with the ideas of development and use them extensively in their understanding of the world. Most ordinary people have considerable knowledge of the ideas of development, substantial knowledge about the major countries of the world, can rate countries on their levels of education and development, and believe that there is an association between socioeconomic development and family structure. As outlined earlier, we believe that the spread of developmental models, particularly developmental

idealism, has dramatic implications for family change. It is likely that as these ideas have spread, they have become causal factors in facilitating change. It is too early to draw conclusions about the sources of these ideas in Nepal or about their implications for family change. Further data analysis will be required for answering those questions.

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Table 1: Nepali Perceptions of Whether Certain Family, Social and Economic Attributes Are More Common in Nepal or the U.S., in Traditional or Developed Places, in Rich or Poor Places and in Educated or Uneducated Places.

Question	Nepal	US	Same	Missing	Traditional	Developed	Same	Missing	Poor	Rich	Same	Missing	Uneducated	Educated	Same	Missing
Child marriage	82.3	15.3	0.6	1.9												
People marrying at older ages					19.0	80.3	0.2	0.6	24.2	73.2	1.5	1.1	18.4	80.1	0.6	0.9
Marriages arranged by parents ¹	90.7	7.3	0.4	1.7	67.2	30.9	1.1	0.7								
Young people choosing their spouse									26.4	66.1	6.3	1.1	8.4	89.4	1.1	1.1
Women having a high degree of respect ²	18.6	78.0	1.3	2.0	19.0	79.1	0.9	0.9	16.9	79.7	2.8	0.6	8.4	89.9	0.9	0.7
Divorce	52.1	42.6	1.1	4.1	32.0	63.9	2.6	1.5	42.1	51.0	4.7	2.2	54.4	41.3	2.6	1.7
Married couples using contraception					7.4	91.6	0.6	0.4	14.9	81.4	2.6	1.1	6.3	92.2	0.7	0.7
Women who never marry ³	27.4	65.4	1.9	5.4	33.0	60.0	6.0	1.1								
Large families with many children	87.9	10.4	0.6	1.1	74.7	24.6	0.4	0.4								
Polygamous families	84.9	10.8	0.7	3.5	61.8	35.2	2.0	0.9								
Parental control over the earnings of adult children	57.4	38.2	1.3	3.2												
Adult children having more control over their earnings					13.8	84.2	1.3	0.7								
Working for pay ⁴	13.0	84.7	0.7	1.5	19.2	78.2	1.9	0.6								
People living in cities	13.2	84.4	0.4	2.0												
Married sons living with their parents	72.1	24.4	0.6	3.0												
Children dying before their first birthday	87.0	9.3	1.1	2.6												
Family solidarity	48.4	47.5	1.5	2.6												
Personal freedom	27.6	69.5	0.9	2.0												
High incomes	9.5	88.8	0.2	1.5												
Equality	35.6	60.3	1.5	2.6												
High education	6.0	91.8	.7	1.5												
Good quality of life	11.7	85.5	1.1	1.7												
Activities organized around the family	90.9	6.7	0.9	1.5												
People working on farms	93.7	4.8	0.2	1.3												

Bold-the response we believe most closely matches that provided by external criteria of objective reality and developmental thinking

¹ The traditional/developed comparison used the wording “Parents controlling who their children marry.”

² This wording only used for US/Nepal comparison. Other comparisons used “Women getting treated with respect.”

³ Traditional/Developed comparison used the wording “People deciding not to get married.”

⁴ Developed/Traditional comparison used the wording “People working away from their family for pay.”

Table 2: Mean Country Scores on Education and Development as Reported by the United Nations and Nepali Respondents

Countries	Education			Development		
	% Responding to First Question	% Responding to Probe ¹	% No Response After Probe	% Responding to First Question	% Responding to Probe ¹	% No Response After Probe
England	96.6	1.1	2.2	97.2	0.9	1.9
United States	96.5	1.7	1.9	98.1	0.1	1.7
Japan	92.2	5.4	2.4	97.6	0.9	1.5
Brazil	94.8	2.8	2.4	96.5	1.3	2.2
China	96.8	1.3	1.9	97.8	0.4	1.9
India	95.9	1.9	2.2	98.0	0.7	1.3
Nepal	93.5	4.8	1.7	98.5	0.7	0.7
Somalia	88.3	8.4	3.4	94.2	3.2	2.6
Countries	United Nations Education Index (x10) ²	Mean for Respondents of First Question	Mean for Respondents of Probe ¹	United Nations Human Development Index (x10) ³	Mean for Respondents of First Question	Mean for Respondents of Probe ¹
England	9.9	7.29	6.17	9.3	7.52	5.40
United States	9.7	8.36	6.56	9.37	8.40	8.00
Japan	9.4	7.33	4.83	9.32	7.51	4.40
Brazil	9	6.49	4.67	7.77	6.40	4.71
China	7.9	6.91	7.71	7.21	7.34	4.00
India	5.7	6.03	4.90	5.9	5.90	4.00
Nepal	5	4.84	4.15	4.99	3.82	1.00
Somalia ⁴	1.6	5.59	5.44	2.9	5.81	4.76
Correlation between UN and Nepal respondent's scores		.80*	.30		.77*	.53
Correlation between UN and Nepal respondents' scores without Somalia		.88**	.43		.90**	.81*

* p< .05 **p<.01 ***p<.001

¹ Total number of respondents is 537. Those who responded that they couldn't give a rating were probed "Even if you don't know exactly, what would be your best guess for...?"

²2003 Human Development Report, Education Index. The Education Index is composed of the literacy rate and school enrollment percentages of the country. (www.undp.org/hrd2003)

³2003 Human Development Report, Human Development Index. The Human Development index is composed of GNP per Capita, life expectancy and the Education Index. (www.undp.org/hdr2003).

⁴ United Nations scores were imputed.

Table 3: Bivariate Correlations Between *Individual* Respondent’s Ratings of Education and Development and United Nations’ Ratings of Education and Development¹

Gave Answer Without Probe				
Percentiles	All countries		Without Somalia	
	Education	Development	Education	Development
25 th	0.10	0.15	0.12	0.30
50 th	0.43	0.44	0.57	0.64
75 th	0.70	0.71	0.80	0.83
N	419	491	453	503

Gave Answer				
Percentiles	All countries		Without Somalia	
	Education	Development	Education	Development
25 th	0.07	0.15	0.09	0.30
50 th	0.41	0.44	0.55	0.62
75 th	0.69	0.71	0.78	0.82
N	512	521	517	522

¹ These correlations are computed at the individual respondent level. They represent the Pearson correlation coefficient between the country scores given by an individual for education (or development) with the United Nations scores for the same countries on education (or development). The possible range is from –1 to 1.

¹ Although all the relevant information for Somalia (i.e. GDP per Capita, education information, life expectancy) is available through the UNDP, their education and human development scores were not calculated by UNDP for Somalia. Using the data from the other countries and the information from Somalia we imputed the missing scores on both education and development.

² See Converse and Presser 1986 and Schwarz 1999 for more general discussions of acquiescence.

³ Interpretation of this result is beyond the scope of this paper

⁴ Interviewers were instructed to accept the answer that the characteristic was equally likely to be found in either country, but interviewers were not to suggest it as a response option.

⁵ 12 percent of respondents gave Nepal a 10 on the development scale.