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THE MAKING OF FAMILY VALUES: DEVELOPMENTAL IDEALISM IN GANSU, CHINA

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Abstract

This paper examines the role of developmental thinking in the making of family values. We analyze survey data collected from Gansu Province in China with regular and multilevel logit models. The results show that individuals' endorsement of neolocal residence, self-choice marriage, gender egalitarianism, late marriage for women, and low fertility depends on the conjunction of preference for development and beliefs in its association with those family attributes, which we term *developmental idealism associational evaluation*. Furthermore, such impact of developmental thinking on family values holds robust in the presence of indigenous ideational forces, in this case Islamic religion. Although Islam influences family values in the opposite direction than developmental ideas do, the effect of Developmental Idealism associational evaluation does not differ significantly between Muslims and non-Muslims.

Keywords

family values; developmental ideas; Islam; Gansu

1. INTRODUCTION

Ideational explanations of international family change have become increasingly common in the literature. For example, the worldwide family planning movements (Barrett and Frank 1999) and the efforts to improve women's status (Berkovitch 1999; Boyle 2002; Yount 2004) have been due at least partially to the enactment of a "world culture", which promoted concepts such as progress, individuality, human rights, freedom, and equality (Meyer et al. 1997). In demography, cultural changes toward individualism and freedom in postwar Europe play a central role in the second demographic transition model offered by Lesthaeghe (2010) and van de Kaa (1987). In addition, Johnson-Hanks et al. (2011) have attributed family changes and variation to various "schemas"—the mental structures that

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provide roadmaps for everyday behavior. In this paper, we take a particular interest in how individuals' family values are influenced by ideas concerning development.

Over the past two centuries, there has been a rise of family values endorsing such attributes as nuclear families, self-choice marriage, romantic love, equal spousal relationships, late marriage, and lower fertility (see, for example, Gubenskaya 2010; Inglehart 1997; Lesthaeghe and Meekers 1986; Thornton 1985, 1989; Thornton et al. 1983; Thornton and Philipov 2009; Thornton and Young-DeMarco 2001; Dorius and Alwin 2011; Esteve et al. 2012; Surkyn and Lesthaeghe 2004; van de Kaa 1987, 2002). Parallel to the rise of these family values has been a worldwide dissemination of developmental thinking, which puts the idea of development at a central place in people's minds (e.g., Ferguson 1999; Osella and Osella 2006; Pigg 1992). Thornton (2001, 2005) argued that those two streams of ideational changes have been closely connected and have reinforced each other.

According to Thornton (2001, 2005), family scholarship from the 18th century has been dominated by a developmental worldview that has posited human societies going through stages of progress and that those stages of development are associated with different family behavior. This family scholarship associated the highest levels of development with nuclear families, self-choice marriage, romantic love, equal spousal relationships, late marriage, and lower fertility, which it labeled as developed or modern family dimensions. Thornton has labeled the ideas of this societal and familial model *developmental idealism* (DI). He has argued that these ideas about modern societies and modern families have been spread widely around the world, both among elites and non-elites, with implications for family behavior. Within the ideas of developmental idealism Thornton has identified both beliefs and values as important components, with values also being seen as belief statements that contain evaluations of the goodness or badness of an attribute. Thornton summarized the ideas of developmental idealism into four fundamental beliefs and values: (1) developed society is good; (2) the modern family is good; (3) development and the modern family are causally associated; and (4) individuals have the right to be free and equal, with social relationships being based on consent.

Since its initial formulation, DI theory has informed empirical research in numerous countries. The topics range from DI measurements (Thornton et al. 2010a; Thornton et al. 2012c) to the distribution of DI beliefs and values among different social groups (Abbasi-Shavazi et al. 2012; Binstock and Thornton 2007; Thornton et al. 2010b), and to their influences on family behaviors (Cammack and Heaton 2011; Guend 2011; Kavas and Thornton, 2013; Thornton and Philipov 2009; Yount and Rashad 2008). However, previous literature has treated the DI beliefs and values as separate issues rather than considering their interrelationships. This paper, for the first time, weaves the DI beliefs and values into a psychological mechanism producing the family values that DI language labels as modern (labels that we also use in our discussion of the framework²). Patterning on the well-established expectancy-value model in psychology (e.g., Fishbein 1963, 1967; Fishbein and

²We use the language of developmental idealism and modernity in our discussion in order to describe and analyze developmental idealism in its own terms. However, we do not endorse certain societies or attributes themselves as modern or traditional. See Thornton (2005) for a discussion of the language and labels used in describing developmental idealism as a belief and value system and the language and labels used in describing real societies and attributes.

Ajzen 1975), we articulate a micro-level value formation process called *DI associational evaluation*—namely, that values about the positivity of development (DI idea 1) and belief in the associations between development and certain modern family behaviors (DI idea 3) jointly lead to positive values concerning those family behaviors (DI idea 2).

Of course, the idea of development is not the only source of legitimacy. Religious doctrines and organizational capacities are some of the most important alternative structures to DI as they provide their own long-standing schemas and authority. Several empirical investigations of DI have acknowledged the roles played by indigenous ideologies, yet so far no study has formally assessed DI's influences net of strong local ideologies (Allendorf 2013; Guend 2011; Cammack and Heaton 2011; Kavas and Thornton, 2013; Thornton and Philipov 2009; Yount and Rashad 2008; Yount et al. 2010).

This study offers the first empirical investigation on the influence of DI associational evaluation on family values. Using survey data from Gansu Province in China, where a large Muslim population dwells, we assess the impact of DI associational evaluation on individuals' endorsement of living arrangements, parental involvement in spouse choice, gender equality, fertility, and age at marriage. We also consider the local Islamic religion in juxtaposition with DI beliefs and values to examine the influence of Muslim religion and the net effect of DI associational evaluation. Finally, we examine whether DI associational evaluation influences are modified by the local Islamic religion.

2. THEORETICAL FORMULATION

2.1. Developmental Paradigm

The world, especially since WWII, has experienced the rise of a world culture (Barrett and Frank 1999; Krücken and Drori 2009; Meyer et al. 1997; Thomas et al. 1987). Ideas like individuality, rights, freedom, and equality have been disseminated around the world and gained great institutional authority (e.g., governments, non-governmental organizations, laws, and school curriculums). One key element of this world culture is the idea of progress or development (Meyer et al. 1997). Thornton (2001, 2005; also see, Melegh et al. 2012; van de Kaa 2010) has argued that at least since the Enlightenment a developmental paradigm has characterized the worldviews of many scholars, policy makers, and other elites in the West. The paradigm specifies an essentialized uni-linear trajectory of history, along which all countries progress at different rates (also see Harris 1968; Mandelbaum 1971; Nisbet 1969/1975; Sanderson 1990). Consequently, at any given moment different societies can be ranked into a developmental hierarchy. For recent centuries northwest Europe and its overseas diaspora have generally been assigned to the top of the hierarchy, while other societies are viewed as less modern or developed and occupy lower positions on the scale.

Such worldview, which boils qualitative differences between countries down to a single dimension of development or modernity, has been challenged by many social scientists in recent decades (e.g., Amin 1989; Baker 1998; Bock 1956; Böröcz 2000; Böröcz and Sarkar 2005; Chakrabarty 2000; Comaroff and Comaroff 1992; Hodgen 1964; Jennings 1975; Mandelbaum 1971; Nisbet 1969; Szreter 1993; Tilly 1984; Wallerstein 1991). Nevertheless, the existence of developmental hierarchies in people's minds has been real and prevalent.

Since the Age of Discovery, the developmental paradigm was distributed by colonialists, revolutionaries, missionaries, academics, educators, rights advocates, business entrepreneurs, and media agents from its northwest European origin to numerous societies (Thornton 2005). Throughout the world, the developmental doctrine has won extensive promotion by state governments and elite organizations (Boli and Thomas 1997; Chabbott 1999; Latham 2000; Meyer et al. 1997; Nisbet 1969). At the individual level, recent surveys in thirteen diverse populations show that developmental hierarchies are widely perceived by the ordinary respondents, and that the perceived hierarchies well conform to the version constructed by the United Nations (Thornton et al. 2012a; also see Binstock and Thornton 2007; Melegh et al. 2012).

The global triumph of the developmental paradigm and its product, perceived developmental hierarchies, have profound implications for social thinking at the individual level. Psychologically, the salient idea of development functions as a cognitive hub from which people infer knowledge about unknown things and derive value preferences (see Ajzen and Fishbein 1980 and Fishbein and Ajzen 1975 for discussions on salient ideas). In China, for example, when asked about economic inequality in other countries, which was not a familiar topic to most lay Chinese people, they were able to give answers based on what they believed about the level of development in those countries and what they believed about the relationship between development and inequality (Xie et al. 2012).

2.2. DI Associational Evaluation

With regard to family, an ideational system, termed developmental idealism (Thornton 2001, 2005), has grown out of the conception of development. Surveys conducted in Argentina, China, Egypt, Iran, Nepal, and the United States all ascertained that DI beliefs and values were widely accepted in those countries (Abbasi-Shavazi et al. 2012; Binstock and Thornton 2007; Thornton et al. 2012a, b, and c). While the strength of beliefs and values varies by countries and socio-demographic groups, the levels of acceptance are generally high.

In the initial formulation, the four DI beliefs and values were theorized as “*independent and conceptually distinct*” (Thornton 2005: 136), and this ideational system was proposed to provide an explanation for *behavioral* outcomes (Thornton 2001, 2005). Indeed, the empirical literature on DI has always treated the beliefs and values as separate items with behavioral implications (e.g., Abbasi-Shavazi et al. 2012; Cammack and Heaton 2011; Guend 2011; Kavas and Thornton, 2013; Thornton and Philipov 2009; Thornton et al. 2012a, b, and c; Yount and Rashad 2008). In this paper, we add to the DI literature by investigating family *values* as a result of the *conjunction* of another DI value and a DI belief. Specifically, we propose that it is the conjunction of the endorsement of development and the perceived association between development and certain family behaviors that leads, at least in part, to the endorsement of those family behaviors. We label this value-formation mechanism as *DI associational evaluation*.

As a micro-psychological process, our conceptualization of DI associational evaluation builds upon the expectancy-value model (e.g., Feather 1982; Fishbein 1963, 1967; Fishbein and Ajzen 1975). The key usage of the expectancy-value model is to account for the

formation of attitudes, defined as “dispositions to respond with some degree of favorableness or unfavorableness toward a given object” (Fishbein and Ajzen 2010: 96). According to Fishbein and Ajzen (1975, 2010), (un)favorableness toward a given object flows directly from “preexisting evaluations of the attributes that become linked to an [the] object” (Fishbein and Ajzen 2010: 97). In our context, this mechanism involves two DI ideas. On the one hand, the DI value that development is good (DI idea 1) serves as the preexisting evaluation.³ On the other hand, the DI belief that development and modern family are intrinsically associated (DI idea 3) provides a cognitive pathway for the positive value of development to be applied to concrete family behaviors. Since Western Europe and North America currently occupy the apex of the development scale in most people’s minds, family behaviors typically observed in contemporary Western societies such as self-choice marriage, nuclear family, equal spousal relationship, late marriage, and low fertility are viewed as good and desirable. Of course, the perceived associations between development and those family behaviors are not necessarily true in the real world, but as long as the beliefs are established, the positive aura over development is likely to facilitate the endorsement of family behaviors typically associated with Western societies.

The expectancy-value model has a multiplicative functional form. Fishbein and Ajzen (2010:97) have formally written the theory as $A \propto \sum b_i e_i$, where in our context A stands for attitude toward or value concerning a modern family behavior (e.g., neolocal residence, fewer number of children), b_i is the strength of the belief that that family outcome is linked to attribute i (i.e., development), and e_i is the evaluation of attribute i . With a summation operator, this formulation also accommodates additional attributes other than development that are believed to be intrinsically characteristic of modern family. While acknowledging the broader truth of that panoramic view, in this study we maintain a focus on development as the sole attribute of interest. Consistent with the multiplicative specification, we emphasize that the power of DI associational evaluation depends on the *conjunctural direction and strength* of the first and third ideas of DI. For example, if one strongly favors development and at the same time associates it positively with, say, neolocal residence, one may easily conclude that it is good for married couples to set up new households away from their parents. If either the first or third DI idea is absent or points in a different direction, the resulting attitude (or value) would be categorically different. In the above example, one might still strongly prefer development, but a negative association of it to neolocal residence will drive a person’s attitude in the opposite direction.

2.3. Alternative Ideational Structures

While focusing on developmental ideas, DI theory also recognizes the importance of coexisting alternative ideational models (Thornton 2005, 2010a; also see, Inglehart and Baker 2000; Melegh 2010). As a world religion, Islam is known to have strong moral implications for both public and family life (e.g., Ali 2008; Calderini 2008; Huntington

³Although development has been typically understood as eternal accumulation of material wellbeing (Thornton 2005: 137–138; also see, e.g., Condorcet 1796; Ekirch 1951; Godwin 1926/1793; Hegel 1878/1837; Marx and Engels 1965/1848; Nibset 1980) and associated with positive ethics and morality (Böröcz 2006; Chabbott 1999; Latham 2000; Taylor 2004; Thornton et al. 2010b; United Nations 2005–2012), we acknowledge that important alternatives do exist. For instance, it has been suggested that development is sometimes associated with excessive sex liberty, atheism, violence, etc. (Liechty 2003; Deeb 2006; Escobar 1988; Yount et al. 2010).

1996; Inglehart 2007; Moaddel 2007; Rippin 2008; Stivens 2006). Consistent with Islamic doctrine (e.g., Ali 2008; Calderini 2008), residents in Muslim-majority countries as well as Muslim immigrants in European societies, on average, hold less modern ideas on issues such as female labor force participation, intergenerational living arrangements, spousal relationships, and women's reproductive autonomy (e.g., Ahmed 1992; Basit 1997; El-Islam 1983; Lesthaeghe 2000; Nirmila 2009; Pettersson 2007). For example, a recent study on international fertility change found that while 79% of Chinese and 61% of Nepalese respondents agreed that having one child was better than having three, the endorsement levels in Egypt and Iran were merely 16% and 36% (Thornton et al. 2012b: Table 4).

Is DI associational evaluation, then, equally effective in leading Muslims to endorse modern family? Previous empirical studies on DI have not offered a definitive answer to this question. We do know that the developmental hierarchies perceived by respondents in Muslim-majority countries are fairly similar to the hierarchies perceived by respondents in other countries (Thornton et al. 2012a). Moreover, Muslim respondents are found to associate development strongly—sometimes even more strongly than respondents in non-Muslim societies—with late marriage, self-choice marriage, neolocal residence, low fertility, gender equality, and so on (Abbasi-Shavazi et al. 2012; Binstock and Thornton 2007; Thornton et al. 2012b; Thornton et al. 2012c). In other words, at least some of the pieces needed for DI associational evaluation to work are in place among many Muslims. However, whether those ideational components enable equally effective DI associational evaluation among Muslims and non-Muslims remains unclear.

3. RESEARCH SITE AND HYPOTHESES

3.1. Developmental Thinking and Family in China

We chose China as the site of research because its policy environment has been highly pertinent to the mechanism of DI associational evaluation. Since the middle of the 20th century, developmental discourse has been ubiquitous in China. Prior to the Reform era beginning in the late 1970s, the official Marxian philosophy of history that dominated much of the national policy making was that China was progressing from a socialist to a communist society. During the Reform era, the central tenet of developmental discourse has shifted from class relations to national economy, and as a corollary, the apex of the developmental hierarchy has shifted from the Soviet Union (or perhaps more often an imagined communist future) to the West. In 1985, the then top Party leader, Deng Xiaoping, remarked that “peace and development are the two major issues of the contemporary world.” Later, during his 1992 inspection trip to South China, Deng once again commented that “development is the hard truth.” Both statements were enshrined as supreme guidance for the entire country. After two decades of rapid economic growth, in the early 2000's the government launched yet another national campaign to popularize the idea of “scientific development,” which stressed progress on multiple fronts rather than focusing on economic areas only (Song 2008). Despite shifting substantive focus of developmental arguments, the teleological flavor and ultimate legitimacy of the concept of development in Chinese rhetoric have not changed in the last four decades.

Regarding development's association with modern family, the revisions of developmental rhetoric from class relations to socioeconomic issues are unlikely to have produced appreciable differences, because the communist family ideal happens to be well aligned with the predictions that are based on perceptions of western experiences (Engles 2010/1884; Goode 1963; Wolf 1986). It has been argued that the socialist transformation movement in the mid-1950's effectively challenged long-standing patriarchal norms in urban China and led to later marriages by self-choices (rather than arranged by parents), more equal and romantic spousal relations, and a departure from the historical value of filial piety (Whyte 1990, 1995, 2003, 2004; Whyte and Parish 1984; Yang 1959). These challenges were to a great extent justified by the discourse of socialist modernization (Diamant 2000). During the post-Mao era, the family planning program continued to promote late marriage, late childbearing, and low fertility in the name of development, while tying the opposites to backwardness and poverty (Davis and Harrell 1993; Greenhalgh 2008).

Given such policy background, it is safe to say that the two DI ideas required for DI associational evaluation—positivity of development and its association with modern family—are both part of the mainstream party thoughts in contemporary China. Of course, the direction and strength of each idea necessarily vary across individuals, producing substantial heterogeneity in their conjunctural strength which enables us to empirically test the effect of DI associational evaluation on family values.

Hypothesis 1: A strong conjunction between endorsement of development and belief in its association with modern family (i.e., DI associational evaluation) leads to greater likelihood to endorse modern family.

3.2. Islam in Gansu

Beyond the net influence of DI association evaluation, we also ask if it penetrates through indigenous alternative ideational models. Specifically, we assess if Islam changes the way it works. This cannot be achieved by pooling data collected in Muslim and non-Muslim countries, since that comparison captures not only the differences made by Islamic religion but also other confounding factors that are difficult to account for, such as regional history, cultural tradition, and international politics. Instead, we chose to conduct individual-level comparison between Muslims and non-Muslims in one homogenous area—Gansu Province in northwest China.

In China, ten out of fifty-five Chinese ethnic minorities⁴ are predominantly Muslim, which are, in the order of population size, Hui, Uyghur, Kazak, Dongxiang, Kyrgyz, Salar, Tajik, Bonan, Uzbek, and Tatar. The ten ethnic groups add up to 20.3 million Muslims, accounting for 1.64% of the national population (China Statistical Bureau 2002: Table 2-1). In 2005, Gansu was home to two large Muslim ethnic groups—Hui (4.1%) and Dongxiang (1.8%) (Gansu Statistical Bureau 2007: Table 2-1). Unlike other Chinese Muslim ethnicities who are mostly of Turkic ancestries, Hui and Dongxiang people are practically indistinguishable

⁴Though in Western societies the Chinese people are often considered as one single ethnic group, substantial internal heterogeneities exist in biological ancestry and ethnic culture. In the 1950's, the Chinese state identified fifty-six ethnic groups (officially termed "nationalities"), who collectively constituted the Chinese nation. Among all Chinese ethnicities, Han consist of the overwhelming majority, accounting for 91.5% of the national population in 2000 (China Statistical Bureau 2002: Table 2-1).

from Han Chinese in physical appearance (though they both have non-Han components in biological ancestry) and are well assimilated into Han ethnic culture (e.g., Chang 2006; Ma 2004; Lipman 2004). Therefore, in Gansu the difference between non-Muslim Han people and Hui and Dongxiang Muslims is essentially religious adherence to Islam, a difference that is only marginally confounded by ethnic culture and biological ancestry.

Although Islam is generally regarded as a “socially pervasive” religion (Gellner 1983), the ideational influences of Islam in today’s Gansu are more pertinent to private than public domains. Muslim communities in Gansu suffered recurring state violence during the Manchu Qing Dynasty (1644–1911) (Li and Yu 1988; Lipman 1997; Zhang 2001). During the turbulent early 20th century, to make Gansu a safe place for Islam and its adherents, local Muslim leaders pledged allegiance to the central Republican government, which facilitated an integration between religious and the newly-forged Chinese national identities (i.e., Sino-Muslim) (Lipman 1997). Under the communist regime, Gansu Muslims were granted relative autonomy and freedom of religion until the Cultural Revolution (1966–1976), when all religions were outlawed and persecuted across the country. Since the late 1970’s, however, there has been an Islamic revival—in part an effort of restoration but also a reaction to various social “problems” that were believed to be caused by rapid economic growth (Armijo 2008).

Due to such historical experiences and their minority status, the expressed discontent of today’s Gansu Muslims, if any, is not so much about the state’s political-legal basis as issues in the private sphere of life (e.g., Gladney 1996, 2003; Luo 2007). With regard to family, our calculations based on 2005 census survey data show that Gansu Muslims are further away from the modern family model than Han people. Specifically, they tend to marry earlier (by approximately 1.5 years), live in bigger families (with 0.7 more person per household), have more children (0.3 more child per woman), and have wider spousal age gaps (also see Luo 2007). Taking these behavioral outcomes as revealed preferences, we propose our second hypothesis:

Hypothesis 2: Muslims are less likely to endorse modern family values.

While acknowledging Islam as an influential ideational structure that operates in the opposite direction as DI associational evaluation does, we have conceptualized the latter as a general psychological process which therefore should be equally effective among Muslims and non-Muslims, hence our third hypothesis:

Hypothesis 3: The influence of DI associational evaluation on the endorsement of modern family does not differ between Muslims and non-Muslims.

4. DATA AND METHODS

4.1. 2007 Gansu Survey

Targeting all adult residents (aged 18+), the 2007 Gansu survey yielded a probability sample of 632 respondents (analytic $N = 621$) with an overrepresentation of Muslims (i.e., Hui and Dongxiang) but was otherwise representative at the provincial level. The survey adopted a multi-stage sampling scheme. Among the fourteen prefectures of the province, six were randomly selected (i.e., Linxia Hui Autonomous Prefecture, Lanzhou, Baiyin, Tianshui,

Dingxi, and Longnan). Within each prefecture, three communities were chosen at random. To identify enough Muslim respondents, six communities were selected in Linxia Hui Autonomous Prefecture. Finally, for each community about thirty respondents were randomly determined and interviewed. The survey was fielded by Gansu Provincial Academy of Social Sciences, which helped yield a high response rate of 94%.

As part of the international survey program on developmental idealism, the Gansu survey directly measured DI ideas. The correlation between ethnicity and religion turned out to be perfect—none of the Han respondents believes in Islam while all Hui and Dongxiang respondents self-identify as Muslims. The label “ethno-religion” is used to differentiate the two comparison groups—Han non-Muslims vs. Hui and Dongxiang Muslims. As discussed above, this contrast mostly captures differences due to Islamic religion rather than those due to biological ancestry and ethnic culture. The descriptive statistics are summarized in Tables 1 and 2.

4.2. Dependent Variables

Our outcome variables, modern family values, were directly measured on five different substantive aspects. During the survey, each respondent was asked:

Overall, which do you think is better for most people around the world today—
married children living with their parents, or married children living separately?

Similarly, respondents were asked which item in the following pairs is better: *young people choosing their own spouses or parents choosing their spouses for them; a society in which there is equality between women and men or a society in which there is not equality between women and men; having one child or having three children; marrying at the age of 22 or marrying at the age of 28*. In what follows we refer to these five dimensions as *neolocal residence, self-choice marriage, gender equality, late marriage for women, and fewer children*. For each dimension, endorsement of the modern family is coded 1 and otherwise 0. The summary statistics are reported in Table 2.

4.3. Key Independent Variables: DI Associational Evaluation Indices

Our main explanatory factor is DI associational evaluation, for which we constructed five different indices, one each for our five family dimensions: neolocal residence, self-choice marriage, gender equality, late marriage for women, and fewer children. We constructed these five separate indices so that for each family value dependent variable, there would be a corresponding DI Associational Evaluation Index. Following our earlier discussion, we constructed each index as the product of perceived positivity of development and the development-family association, so that the power of DI associational evaluation would depend on the conjunctural strength of the two DI ideas.

The positivity one attaches to development is retrieved using a binary response question asking if *a moderately developed society [coded 1] or a society that is highly developed [coded 2] is better for most people around the world today*. The development-family association is measured, for each of the five dimensions, with a hypothetical question. For

example, the respondent's perceived association between development and neolocal residence is based on the following survey item:

[Now, please think about what life is like today in countries that are not developed and compare it to what life is like today in countries that are developed. Please tell us whether each of the following things, in general, is more common in countries that are not developed or more common in countries that are developed.]

First, how about married children living with their parents—in general, is this more common in countries that are developed or more common in countries that are not developed?

A. Not developed [coded 1]

B. About the same [coded 0]

C. Developed [coded -1]

Similar questions were also asked with regard to self-choice marriage, gender equality, late marriage for women, and number of children.

Finally, for each of the five dimensions of family life, a DI Associational Evaluation Index was constructed as the product of the development positivity variable and the corresponding development-family association variable. To facilitate interpretation, all DI Associational Evaluation Indices were then constrained between 0 and 1, with greater values representing stronger conjunctural strength between the two DI ideas. The distributions of the component items are reported in Table 1. The resulting indices, as the key analytical variables used in statistical models, are summarized in Table 2.

The multiplicative construction of the indices is sensitive to the coding of component variables. As shown in Table 1, we have coded positivity of development as [1/2] rather than [0/1], and each association variable as [-1/0/1] rather than the more conventional [1/2/3]. As such, each index contains 5 levels [-2/-1/0/1/2] (later rescaled to [0/.25/.5/.75/1] for ease of interpretation).

4.4. Other Independent Variables

Our second main explanatory factor is Islamic religion. Our Islamic religion variable is a straightforward indicator of Islamic religious affiliation versus non-Islamic religious affiliation. As mentioned before, the Islamic adherence is perfectly correlated with Hui and Dongxiang ethnicities but only minimally confounded with ethnic culture and biological ancestry.

In addition to the two ideational factors, we also used a number of other covariates in our analyses, including gender (male = 1), birth cohort dummies, marital status (currently married = 1), urban/rural household registration (a.k.a. *hukou*, urban = 1), logged personal income in 2006, and years of education. The cutoff points between birth cohort dummies correspond to what Whyte (2010) termed China's two "social revolutions"—the socialist transformation prior to 1956 and the economic reform since the late 1970's. Previous literature has identified these variables as effective explanations for family values (e.g.,

Inglehart and Pippa 2003; Logan and Bian 1999; Shu 2004). In what follows we also refer to these control variables as structural factors to distinguish them from DI associational evaluation and Islamic religion. The descriptive statistics of all analytic variables are summarized in Table 2.

4.5. Statistical Models

As is standard with binary outcomes, we estimated logistic regressions predicting respondents' endorsements of neolocal residence, self-choice marriage, gender equality, late marriage for women, and fewer children, respectively. The independent variables are the same across the models except for DI Associational Evaluation Indices, which vary across the dependent variables to match the outcome variable. These models are labeled "dimension-specific models" in Tables 3 and 4. For each dimension, four different sets of independent variables (Panels A to D) are specified to test different hypotheses.

However, dimension-specific models have two disadvantages. First, they do not utilize the information concerning the correlations among the five outcomes. Second, they do not yield interpretations regarding family life in general. Therefore, a composite analysis is necessary to account for the within-individual clustering effect (i.e., the fact that each individual's views on those five aspects are not independent of each other) and to draw conclusions about family life in general. For the composite analysis, we used a multi-level approach that "collapsed" the five dimensions into one multilevel process, where the influences of various DI Associational Evaluation Indices on the corresponding family values were estimated simultaneously at the intrapersonal level (level-1) and the individual characteristics were considered personal-level (level-2) variables (see Xie et al. 2012 for a similar application of multilevel analysis).

As shown in Table 3, the specifications of the multilevel logistic models across Panels A to D correspond to those of the dimension-specific models so that analogous interpretations can be achieved—but with reference to family life in general rather than particular familial dimensions. Below we provide the specifications of the multilevel logistic models:

- A.** Level-1 model: $\log[p_{ij}/(1 - p_{ij})] = \eta_{1j} + \eta_{2j}x_{ij}$
 Level-2 model: $\eta_{1j} = \gamma_{11} + \zeta_j$
- B.** Level-1 model: $\log[p_{ij}/(1 - p_{ij})] = \eta_{1j}$
 Level-2 model: $\eta_{1j} = \gamma_{11} + \gamma_{12}w_{2j} + \zeta_j$
- C.** Level-1 model: $\log[p_{ij}/(1 - p_{ij})] = \eta_{1j} + \eta_{2j}x_{ij}$
 Level-2 models: $\eta_{1j} = \gamma_{11} + \gamma_{12}w_{2j} + \zeta_j$
 $\eta_{2j} = \gamma_{21} + \gamma_{22}w_{2j}$
- D.** Level-1 model: $\log[p_{ij}/(1 - p_{ij})] = \eta_{1j} + \eta_{2j}x_{ij}$
 Level-2 models: $\eta_{1j} = \gamma_{11} + \gamma_{12}w_{2j} + \gamma_{13}w_{3j} + \dots + \gamma_{19}w_{9j} + \zeta_j$
 $\eta_{2j} = \gamma_{21} + \gamma_{22}w_{2j}$

where i denotes the i th family value ($i = 1, \dots, 5$), and j denotes the j th individual ($j = 1, \dots, 621$). The log odds of endorsing modern family ($\log[p_{ij}/(1 - p_{ij})]$) are regressed on the DI Associational Evaluation Index (x_{ij}) irrespective of particular dimensions (except for Model B where x_{ij} is not included). Level-2 variables w_{2j} through w_{9j} are Islamic affiliation (Islam = 1), gender (male = 1), birth cohort dummies for 1956–1976 and 1977–1989 (reference = 1922–1955), marital status (currently married = 1), rural/urban *hukou* (urban = 1), logged personal income in 2006, and years of education, respectively. Unlike linear multilevel models, there is no random error in the linear predictor of the log odds (Cf. level-1 models) because the residual variance of logit models is fixed at $\pi^2/3$.

In addition to generality of the interpretation, another advantage of multilevel analysis was that we were able to include a random component (ζ_j) in the level-1 intercept and allow it to vary among the 621 individuals (level-2 units). The random intercept could be realistically thought of as the unobserved heterogeneity at person (j) level that made individuals more or less inclined to modern family.

Given our cross-sectional setting, the influence of ideational factors on family values inevitably invokes concerns about endogeneity. It is important to clarify that the goal of this study is to reveal the robust dependence of family values on ideational factors, not to rule out the possibility of reciprocal causation. However, we maintain that the causal directions specified in our models are more plausible than their reverses. Theoretically, our analytic scheme is supported by the well-established expectancy-value model in psychology. Substantively, both developmental thinking and Islam are systematically indoctrinated and long-standing belief systems rather than transient ideas that are easily contingent on shifting situations. They are also elaborate ideologies that bear direct implications for our outcomes.

5. RESULTS

5.1. Descriptive Results

Table 1 presents the descriptive results of the DI beliefs and values that are used in the construction of our key predictors, DI Associational Evaluation Indices. A majority of respondents (77.6%) prefer highly developed societies and 66%–92.1% of the respondents positively associate development to the five modern family dimensions. Comparing across ethno-religion, Han respondents are more likely to prefer development. They are also more likely to associate development with modern family—except gender equality.

The resulting conjunctural strengths of the DI beliefs, as captured by the DI Associational Evaluation Indices (Cf. Table 2) are high on average—all but the index for neolocal residence (0.65) score above 0.80 on a scale from 0 to 1. On all five dimensions, DI associational evaluation is weaker among Muslims than Han people, with three differences statistically significant (i.e., self-choice marriage, late marriage for women, and fewer children).

Table 2 also describes all other variables used in our models. The level of endorsement of modern family varies substantially across dimensions. Overall, most respondents endorse self-choice marriage (95%) and gender equality (99%), 78% endorse fewer children, and

less than a half endorse neolocal residence (46%) and late marriage for women (49%). Comparing across religious groups, Muslims' endorsement levels are consistently and significantly lower than Han people. However, as shown by the structural covariates, Muslims also significantly differ from Hans in terms of age, rural/urban residence, and years of education. To formally test our hypotheses, we now continue to the logit models.

5.2. Hypotheses Testing

The first ten columns in Table 3 report the results of dimension-specific logistic regressions predicting, respectively, the endorsement of neolocal residence, self-choice marriage, gender equality, late marriage for women, and fewer children. These five dimensions were then estimated simultaneously with multilevel logit models summarized in the last two columns. For each outcome, Panels A to C correspond to the reduced-form models for our Hypotheses 1 to 3, and Panel D presents the full models which include DI Associational Evaluation Indices, Islam, their interaction, and all the structural covariates. Odds ratios are reported to facilitate interpretation. While the Maximum Likelihood estimators (i.e., logit coefficients) are normally distributed, the odds ratios are not, which makes standard errors on the odds ratio metric not easily interpretable. Therefore, instead of reporting standard errors of the odds ratios, for each odds ratio we calculated a Z-ratio as the absolute value of the logit coefficient divided by its standard errors (see Thornton, Axinn and Xie 2007 for similar applications).

The bivariate models in Panel A partially support our first hypothesis. All odd ratios are greater than 1, confirming that those who score high on the DI Associational Evaluation Indices are more likely to endorse modern family attributes. For the first model, the odds ratio of 2.15 means that those who score 1 on the index are 1.15 times more likely than those who score 0 to endorse neolocal residence. Similarly, the odds ratios for the self-choice marriage, gender equality, late marriage for women, and fewer children are 6.30, 9.83, 1.27, and 1.37, respectively. Although the effects are neither large nor statistically significant (at .05 level) for late marriage for women and fewer children, results of the five dimension-specific models generally confirm the positive role of DI associational evaluation in endorsing modern family items. The composite multilevel model in Panel A shows that, irrespective of specific family dimensions, those who score 1 on the DI Associational Evaluation Index are 2.01 times more likely than those who score 0 to endorse modern family (odds ratio=3.01), and the effect is highly significant at .001 level. We consider the multilevel model more conclusive because its estimation takes into consideration the person-specific unobserved heterogeneities (i.e., random intercept) that simultaneously drive individual's views on all five family items.

Models in Panel B examine the influences of Islamic religion on family values. Consistent with Hypothesis 2, Muslims are 0.42, 0.13, 0.15, 0.33, and 0.62 times as likely as Han people to endorse neolocal residence, self-choice marriage, gender equality, late marriage for women, and fewer children. Except for fewer children, all odds ratios are significantly different from 1. After collapsing the five dimensions using one multilevel model, results show that Muslims are half as likely as Hans to endorse modern family (odds ratio=0.50), which is statistically significant at .001 level.

Moving on to the third hypothesis, in Panel C models we included both ideational factors and their interactions to examine if DI Associational Evaluation Indices influence Muslims' family values in the same way as they influence Han people. The coefficients on interaction terms are inconsistent in both magnitude and direction across dimensions. Importantly, none of the interactions is statistically significant at the 0.05 level, which is also true with the corresponding multilevel model. We consider these results supportive of our third hypothesis—that DI associational evaluation is a universally applicable cognitive process that operates among Muslims and non-Muslims alike. We also notice that, putting DI associational evaluation and Islamic belief in juxtaposition to each other (together with their interactions) has created substantial competition between these two ideational forces—the influence of DI Associational Evaluation Indices on gender equality loses statistical significance and so does Islam's influences on neolocal residence and self-choice marriage.

In Panel D, we further included a set of structural covariates (i.e., gender, birth cohorts, marital status, rural/urban *hukou*, logged income, and years of education) to account for the observed sources of variation in the outcomes that are due to non-ideational forces.⁵ As it turned out, the net effects of DI Associational Evaluation Indices, Islamic belief, and their interactions remained very similar to previous models. In dimension-specific models, on the one hand, the main effects of the indices are all positive and significant for neolocal residence and self-choice marriage; on the other hand, Islamic belief reduces one's likelihood to endorse all five modern family attributes, and the influences are statistically significant for gender equality and late marriage for women. In addition, as indicated by the consistent lack of statistical significance for the interaction terms, the influences of DI associational evaluation are not significantly different between Muslims and non-Muslims. Again, the composite multilevel model yields more conclusive and supportive results for all three hypotheses. The DI Associational Evaluation Index raises one's likelihood of endorsing modern family by 171%, whereas Muslims are half (0.46 times) as likely as Han people to endorse modern family. Both effects are statistically significant but not their interaction, which means that the influence of DI associational evaluation is not qualified by religious adherence to Islam.

So far we have based our test of the third hypothesis on the interaction terms in logit models (here reported on odds ratio metric). However, in nonlinear models the interaction effect does not equal the marginal effect of the interaction term (Ai & Norton 2003), which makes direct interpretation of the estimated coefficients difficult. Therefore, we also calculated the predicted probabilities (based on average marginal effects) for Muslims and Han people at different levels of DI Associational Evaluation Indices to reveal their interactive patterns in more tangible ways. Based on the full models where covariates are held at the mean level, we observe the probabilities of endorsing modern family in Table 4. The last row shows the probability changes over the full span of DI Associational Evaluation Indices (from 0 to 1), which we use as more intuitive indications of the effects of DI association evaluation.

Comparing the two religious groups across the five dimensions, we find that the differences

⁵Urban *hukou* predicts endorsement of gender equality perfectly. As a result, inclusion of the *hukou* variable would lead the logit model to drop all the urban cases. Therefore, for gender equality, we excluded the information concerning rural/urban *hukou* from the full model. The model is otherwise identical across the five family dimensions.

between Muslims and Han people vary in both magnitude and direction. While DI associational evaluation has a stronger impact on Han respondents than Muslims in terms of neolocal residence (12% vs. 11%), self-choice marriage (10.6% vs. 2.2%), and fewer children (6.6% vs. -1.7%), the impacts are weaker among Han than Muslims in terms of gender equality (0.8% vs. 33.4%) and later marriage for women (0.2% vs. 23.3%). Taking all five dimensions together, the random-intercept multilevel model predicts that DI Associational evaluation increases Muslims' probability to endorse modern family by 24.4% and Han's probability by 20.6%, which we consider a difference of limited importance. In conclusion, we recognize that in our sample, DI associational evaluation coefficients for Muslims and Han people are different in inconsistent ways, but we have no evidence to conclude that those differences are not due to random error.

5.3. Notes on other Findings

As shown in Panel A of Table 3, for late marriage for women and fewer children, the effects due to DI Associational Evaluation Indices are statistically insignificant even without controls. However, we refrain from concluding that DI associational evaluation does not influence those two dimensions. Regarding late marriage for women, the survey questions used for the dependent and independent variables are not entirely compatible—while the former uses age eighteen as the threshold to differentiate early and late marriages, the question for the association between development and late marriage for women (which is used in the index construction) uses the age contrast between twenty-eight versus twenty-two. Had the two questions employed the same criterion, the estimated result could have been more pronounced and significant.

The case with fewer children is less curious if we take China's birth control program into consideration. Given extensive exhortation for nearly three decades, a strong sense of political correctness might have permeated evenly through different levels of DI associational evaluation and tinted people's responses. In that case, answers would reflect political correctness, rather than true opinions about low fertility. Of course, if the responses were truthful, we must conclude that variations in preferences for low fertility are indeed not attributable to variations in DI associational evaluation.

In addition, it is useful to note the differences between the influences of ideational factors and those due to the structural factors. Across dimensions, the effects of DI Associational Evaluation Indices and Islam are consistently positive and negative, respectively. However, the coefficients on gender, birth cohorts, marital status, *hukou*, and income all vary considerably across dimensions, pointing to different directions and mostly statistically insignificant. The most consistent structural effect comes from education, which pushes people in the direction of modernity except in the case of late marriage for women. In this sense, ideational explanations account for the variations in people's family values in more systematic ways than structural factors do.

6. DISCUSSION

Our paper provides an individual-level ideational explanation for the endorsement of modern family attributes. Specifically, we have shown how the conjunction of people's

value for development and their perceived associations between development and certain family attributes can jointly lead to endorsement of those family attributes. We integrated developmental idealism in sociology and demography and the expectancy-value model in social psychology to articulate the cognitive process of DI associational evaluation. Our empirical results provide supports for the influences of DI associational evaluation. We also find that such influences are robust in the presence of an alternative ideational model, in this case Islam.

With this paper we make three first-time contributions to the theory of developmental idealism. First, drawing on the expectancy-value framework, we weave together multiple DI ideas, which were initially defined as distinct and independent, into an interactional mechanism that generates modern family values. Second, developmental idealism had been used to explain behavioral trends, but in this paper, we extend DI's relevance to value outcomes. Third, this paper empirically assesses the impact of alternative ideational models, in this case Islam, and its competition with DI in affecting family value orientations.

This paper also has implications for general family scholarship. First, given the continuing expansion of developmental ideas around the world, the global rise of modern family values, in the aggregate form, could be to a great extent attributable to this micro-level psychological phenomenon. Second, our results indicate that developmental ideas and Islamic belief are more consistent than structural factors in explaining the variation in multiple views on the family, which signals the importance of ideational explanations for international family change. In this paper we have focused on developmental thinking, while other ideas such as science, human rights, and legality are also worth investigating.

We advise against two overgeneralizations of our findings. First, our empirical investigation is confined to five specific familial dimensions, which are neither the entirety nor a random sample of all aspects of family life. Although those five dimensions do provide a reasonable coverage of the most important intergenerational, gender, marriage, and fertility issues, it would be unwise to ignore the qualitative differences between concrete family dimensions and claim equal truth of DI associational evaluation for all domains of family life.

Our second reservation has to do with the external validity concerning the Islamic influences. While the relative homogeneity of Gansu helps us identify cleaner effects due to Islamic religion, such effects cannot be generalized beyond Gansu. Today, a total of 1.6 billion Muslims live in more than two hundred countries (Pew Forum on Religion & Public Life 2009). Gansu Muslims cannot possibly fully represent such enormous heterogeneity. Even within China, our results might have been different if we had conducted the study with, for example, Uyghur Muslims in Xinjiang Autonomous Region. In this paper we have treated Islam as a special case of indigenous alternative ideational models that compete with developmental thinking. For an overall view of how Islamic beliefs work in the making of family values, empirical efforts have to go beyond the scope of the current study.

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Highlights

- Preference for development and beliefs in its association with modern family attributes jointly contribute to the endorsement of modern family attributes.
- Local Islamic religion in Gansu, China contributes to the rejection of modern family values.
- The effects of developmental ideas on family values do not differ between Muslims and non-Muslims in Gansu, China.

Table 1

Distribution and coding of items used in DI Associational Evaluation Indices, by ethno-religio

	Total	Muslim	Han
Positivity of development			
% preferring moderately developed society (coded 1)	22.4	26.8	21.7
% preferring highly developed society (coded 2)	77.6	73.2	78.3
<u>Development-family association</u>			
Neolocal residence			
% negative association (coded -1)	31.6	37.8	30.6
% no association (coded 0)	2.4	1.2	2.6
% positive association (coded 1)	66.0	61.0	66.8
Self-choice marriage			
% negative association (coded -1)	6.0	17.1	4.3
% no association (coded 0)	1.9	1.2	2.0
% positive association (coded 1)	92.1	81.7	93.7
Gender equality			
% negative association (coded -1)	9.0	9.8	8.9
% no association (coded 0)	3.5	2.4	3.7
% positive association (coded 1)	87.4	87.8	87.4
Late marriage for women			
% negative association (coded -1)	15.8	26.8	14.1
% no association (coded 0)	0.5	0.0	0.6
% positive association (coded 1)	83.7	73.2	85.3
Fewer children			
% negative association (coded -1)	9.0	14.6	8.2
% no association (coded 0)	1.6	1.2	1.7
% positive association (coded 1)	89.4	84.1	90.2
Sample size	621	82	539

Source: 2007 Gansu Survey.

Table 2Distribution[†] of analytic variables, by ethno-religion

	Total	Muslim	Han	(Muslim-Han) ^{††}
Modern family values (% endorsement)				
<i>Neolocal residence</i>	45.7	28.0	48.4	-20.4 **
<i>Self-choice marriage</i>	95.2	81.7	97.2	-15.5 ***
<i>Gender equality</i>	98.7	95.1	99.3	-4.1 **
<i>Late marriage for women</i>	49.1	26.8	52.5	-25.7 ***
<i>Fewer children</i>	78.4	70.7	79.6	-8.9
DI Associational Evaluation Index (0–1)				
<i>Neolocal residence</i>	0.65 (0.42)	0.60 (0.44)	0.66 (0.42)	-0.06 (0.05)
<i>Self-choice marriage</i>	0.88 (0.24)	0.78 (0.35)	0.90 (0.22)	-0.12 (0.03) ***
<i>Gender equality</i>	0.85 (0.28)	0.84 (0.29)	0.85 (0.28)	-0.01 (0.03)
<i>Late marriage for women</i>	0.80 (0.34)	0.70 (0.40)	0.81 (0.33)	-0.11 (0.04) **
<i>Fewer children</i>	0.86 (0.28)	0.80 (0.33)	0.86 (0.27)	-0.07 (0.03) *
Male (%)	44.9	50.0	44.2	5.8
Age	43.2 (13.8)	40.1 (14.5)	43.7 (13.6)	-3.6 (1.6) *
Birth cohort (%)				
<i>1922–1955</i>	30.6	28.0	31.0	
<i>1956–1976</i>	53.9	43.9	55.5	
<i>1977–1989</i>	15.5	28.0	13.5	
Currently married (%)	87.8	90.2	87.4	2.9
Urban (%)	19.3	31.7	17.4	14.3 **
Personal income in 2006 (yuan)	3,117 (3,744)	3,235 (4,246)	3,099 (3,665)	136 (444)
Years of education	7.3 (3.4)	6.2 (3.7)	7.4 (3.4)	-1.3 (0.4) **
Sample size	621	82	539	

Notes:

[†] Standard deviations are presented in parentheses under means. Percentage distributions are presented in italics.^{††} The last column shows t-test results for differences between Muslim and Han respondents.*
 $p < .05$,**
 $p < .01$,***
 $p < .001$.

Source: 2007 Gansu Survey.

Table 3

Logit and multilevel logit models predicting modern family values

	Dimension-specific models [†]										Multilevel models ^{††}	
	Neolocal residence		Self-choice marriage		Gender equality ^{†††}		Late marriage for women		Fewer children			
	Odds ratio	Z ^{††††}	Odds ratio	Z	Odds ratio	Z	Odds ratio	Z	Odds ratio	Z	Odds ratio	Z
Panel A: Bivariate: DI Associational Evaluation Index												
DI Associational Evaluation Index (0–1)	2.15 ***	3.90	6.30 ***	3.56	9.83 **	2.77	1.27	1.02	1.37	0.94	3.01 ***	9.68
Model/Wald χ^2 (df)	15.61(1) ***		10.31(1) **		6.51(1) *		1.05(1)		0.85(1)		93.75(1) ***	
Panel B: Bivariate: Islam												
Islam (Ref. = non-Islamic affiliation)	0.42 **	3.37	0.13 ***	5.31	0.15 **	2.68	0.33 ***	4.18	0.62	1.80	0.50 ***	6.28
Model/Wald χ^2 (df)	12.36(1) ***		25.27(1) ***		6.36(1) *		19.46(1) ***		3.10(1)		39.48(1) ***	
Panel C: DI Associational Evaluation Index $\times$ Islam												
DI Associational Evaluation Index (0–1)	2.06 **	3.45	10.72 **	3.42	2.53	0.67	0.97	0.12	1.37	0.83	2.79 ***	8.10
Islam (Ref. = non-Islamic affiliation)	0.37	1.96	0.70	0.40	0.03 **	2.60	0.12 **	3.02	0.75	0.40	0.45 **	3.19
DI Associational Evaluation Index $\times$ Islam	1.26	0.35	0.13	1.96	19.67	1.52	3.76	1.65	0.80	0.27	1.26	0.75
Model/Wald χ^2 (df)	27.06(3) ***		34.37(3) ***		15.57(3) **		22.89(3) ***		3.79(3)		121.70(3) ***	
Panel D: Full model												
DI Associational Evaluation Index (0–1)	1.62 *	2.21	9.51 **	3.14	2.72	0.71	1.01	0.03	1.47	1.01	2.71 ***	7.84
Islam (Ref. = non-Islamic affiliation)	0.37	1.85	0.94	0.07	0.02 *	2.39	0.11 **	3.16	0.91	0.13	0.46 **	3.06
DI Associational Evaluation Index $\times$ Islam	1.10	0.15	0.13	1.82	31.04	1.63	4.35	1.79	0.63	0.56	1.22	0.66
Male (Ref. = female)	0.92	0.45	1.29	0.54	0.69	0.45	1.20	1.02	1.11	0.49	1.08	0.83
Birth cohort (Ref. = 1922–1955)												
1956–1976	1.38	1.56	0.23 *	2.42	0.14	1.53	1.40	1.66	1.79 *	2.50	1.21	1.94
1977–1989	1.10	0.31	0.21 *	2.06	0.31	0.75	0.92	0.29	2.24 *	2.25	1.06	0.43
Currently married (Ref. = unmarried)	0.84	0.61	0.96	0.06	1.43	0.29	0.60	1.83	1.19	0.54	0.85	1.13
Urban hukou (Ref. = rural)	2.33 ***	3.48	0.89	0.19	-	-	1.44	1.58	0.86	0.57	1.32 *	2.34
Logged personal income in 2006	1.12	1.42	0.95	0.25	1.22	0.59	0.87	1.85	1.00	0.01	0.99	0.30
Years of education	1.08 *	2.50	1.26 **	2.67	1.12	0.81	0.99	0.24	1.03	0.79	1.03 *	2.02

Dimension-specific models [†]									
Neolocal residence		Self-choice marriage		Gender equality ^{†††}		Late marriage for women		Fewer children	
Odds ratio	Z ^{††††}	Odds ratio	Z	Odds ratio	Z	Odds ratio	Z	Odds ratio	Z
68.25(10)	***	51.43(10)	***	20.25(9)	**	35.6(10)	***	16.45(10)	***
Sample Size	621	621	621	621	621	621	621	621	3,105

Notes:

[†] In dimension-specific models, for each outcome a thematically consistent DI Associational Evaluation Index is used.

^{††} The multilevel models are random-intercept models for binary outcomes that estimate the five family values simultaneously.

^{†††} For gender equality, urban *hukou* predicts endorsement perfectly and problemizes the estimation of logit model. It is therefore excluded from the full model.

^{††††} Z is the ratio of absolute value of the logit coefficient (log odds ratio) to its standard error.

* $p < .05$,

** $p < .01$,

*** $p < .001$.

Source: 2007 Gansu Survey.

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Note: Probabilities are predicted based on the full models in Table 3, where all covariates are held at the mean level.

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