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China: 1995-2007

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## Modernization and the Change of Developmental Idealism Beliefs in China: 1995-2007

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Abstract:

The relationships between social change and family patterns have been a central interest to social scientists for many decades. Modernization theories argue that industrialization and economic development will change people's attitude on family patterns. If that is correct, we expect to see an expansion of Chinese people's beliefs in individualism and gender equality in their family lives, for China has the most rapidly increasing economy in recent decades. This paper studies changes in Chinese people's perceptions of family lives from 1995 to 2007 using China's part of World Value Survey. I find that although there are changes on people's attitudes on family and work, they are neither constant through these twelve years nor correlated with the expansion of education and mass media. It seems that mechanisms predicted by modernization theorists are working in more complex ways in China, where they are affected by traditional Chinese family values and communist legacies.

Keyword: modernization; development; family patterns; attitudes on family and work; China

# **INTRODUCTION**

The relationships between social change and family patterns have been a central interest to social scientists for many decades. Since family is one of the basic units of the society, it will be affected by any major change of the society, and later have prominent impact on the society. Modernization theories have discussed how family patterns in different societies will change with industrialization and economic development. There will be change in people's behaviors, such as postponement of marriage, decline of family size, usage of contraception, more abortion and erosion of traditional family. There will also be change in people attitude, such as the spread of individualism, freedom, consent, and gender equality. (Notestein 1953; Davis 1963; Goode 1963) According to modernization theory, if a society goes through tremendous change, then we can expect its family patterns, both behaviors and attitudes, to change as well.

Chinese society is a good example of this tremendous change. Since its market reform in 1979, China has experienced changes in almost every aspect of its economic and social life. Its economy has grown continuously with a rapid rate for decades. By 2010, it is the world's second largest economy, and also the fastest growing major economy. Living standard enhanced greatly. In 1980, China's GDP per capita is only \$193, but in 2010 that number has increased to \$4,428. (World Bank, 2012) Compare to thirty years ago, people have more access to the outside world through radio, television and internet. Education expands. Literacy rate increases from 66 percent in 1982 to 94 percent in 2009, and post-secondary education increases from 1 percent in 1980 to 26 percent in 2010. (World Bank, 2012)

So, there is a great change in Chinese society. If modernization theory is correct, then we expect to see a change in Chinese family patterns. There may be changes in the way people organize their family behaviors, in people's demographic manners, and in the way people think about their family lives. This paper studies changes in Chinese family patterns, especially the changes in people's perceptions of family lives since China's recent modernization. I will use China's part of World Value Survey (WVS) in 1995 and 2007 to do the analysis, which is the most up to date data on Chinese value and attitude.

This study hopes to make contributions in several ways. Although people are very interested in change of family values and attitudes after China's reform, there is not a lot of research on that subject. There are some studies on change of Chinese sexual behaviors in recent decades (Zhang and et al. 1999; Higgins et al. 2002), and briefly mentioned how change in attitudes have lead to change in behaviors. But sexual behavior is just one aspect of family behaviors, so that attitude change on sexual behavior is not equal to change in family attitude. WVS provides valuable information on change of attitudes and values in the past two decades and allows us to measure change in family attitudes. Besides, as a nation-wide representative sample, WVS can provide more information about the general Chinese population than city samples, and its several waves make it possible for us to trace changes overtime. Chinese family is influenced by traditional and Confucius morals, Communism, Socialism, and western ideas at the same time. Study on this largest developing country will contribute to a better understanding of the relationship of modernization and change in family patterns.

#### THEORETICAL FRAMEWORK

## Modernization Theory on Change in Family Behaviors

Scholars have noticed changes in family patterns in Northwest Europe and North America since 18<sup>th</sup> to 19<sup>th</sup> century, and studied its relationship with modernization. To them, the changes in family patterns in the above areas are largely a result of the process of modernization. Changes in technology started industrialization and urbanization. Thanks to agriculture, commercial and industrial revolution, people had access to sanitary and medical knowledge. Mortality dropped. Change in economy also meant a reorientation of attitudes and beliefs about childbearing and an erosion of traditional family. People took a more rational and secular view about their live, and wanted to take advantage of opportunities of the emerging economy. So that people changed the way they used to organize their families. They postpone their marriage, used contraception and abortion to control family size. (Notestein 1953; Davis 1963) There is an increase of conjugal family, which according to Goode (1963), fit the industrialized society, a society which is based on merit and achievement instead of landholding, provides resources and job opportunities in the cities, and has social institutes like hospitals and schools that undermined the importance of kin groups. With limited kin ties, emotional support between husband and wife, and less detailed obligation to family, conjugal family, a new family pattern becomes prominent in the industrialized society.

# Ideational Changes

Goode's argument (1963) not only points out how conjugal family as a new way of family behaviors "fit" the industrial society, but also how an ideology of conjugal family, a different ideal of family, prepares and facilitates the establishment of industrial

society. People with this new ideal will value individualism and egalitarianism, and prefer a weakened kin ties. In other words, besides change in economic condition, change in ideas of beliefs will also have effects on family pattern of a society. Recent demographic changes in Europe and United States, such as the decline in fertility and the increase of cohabitation, are also influenced by ideational changes. Secularization (Lesthaeghe and Wilson 1986), the trend toward greater self-fulfillment (Schmid 1984), the expansion of postmaterialism (Inglehart 1977) or the "progressiveness" which stresses the equality of opportunities and freedom of choice (van De Kaa 1987) all contribute to this great shift of family formation process, which was known as the second demographic transition.

#### Developmental Idealism

New ideas not only affect on family formation process, but also can be a strong force of social change. Although unilinear modernization models have been criticized as too ethnocentric and too restrictive, ordinary people still believe in the model due to its strong and prevalent message. Thornton (2005) argues that a package of ideas he calls developmental idealism (DI) was disseminated widely around the world where it has been a major force for family and demographic change. There are four fundamental propositions that constitute the notion of DI: (1) modern society is good and attainable; (2) the modern family is good and attainable; (3) the modern family is a cause as well as an effect of a modern society; and (4) individuals have the right to be free and equal, with social relationships being based on consent. DI has been disseminated around the world through many mechanisms—such schools, the mass media, immigration, colonization, the spread of Christianity—facilitated by industrialization and urbanization, and

legitimized by the empirical evidence of the wealth and health of the West. It provides an evaluation standard of social organization, an explanatory framework linking social and economic achievement as both cause and effect of specific family patterns, and thus affected the family ideas and behaviors of billions of individual women and men around the world.

Although people debate about the direction of the causal arrows between cultural/family change and economic change, there was clearly the correlation. (Inglehart 2001) So that if a society goes through industrialization and urbanization, and experiences large expansion of education and mass media, we can expect the dissemination of DI in that population. People will be motivated to change their family behaviors and attitudes to be more "modern". It is very likely that in such a society, we will see extensive individualism and youth autonomy, high regard for women's autonomy and rights, and a more equal gender relationship inside family.

# Modernization Theory and Empirical Research

In spite of the fact that modernization theories start from studies of western countries, many researchers have tried to apply it to explain social changes in industrialized developing world. Rindfuss and Morgan (1983) studied the quiet revolution in Asia where a change from arranged marriage to romantic love leads to increasing early marital conceptions. Jones (2005) studies the increase of non-marriage women in South-East and East Asia. Some research point out how ideational change through modernization can lead to change in people's behavior, such as love match in Taiwan (Thornton, Chang, and Lin 1994), change in son preference in Korea (Chung and

Gupta, 2007), care of the elderly in Japan (Ogawa and Retherford 1993), and preference for smaller families in Nepal (Barber and Axinn 2004).

But not all findings support modernization theories. Ruggles and Heggeness (2008) find no evidence on decline of intergenerational coresidence in developing countries. Abbasi-Shavazi (2008, 2009) describes the continuity of consanguineous marriage and Islamic family morality in Iran. Buttenheim and Nobles (2009) suggest the persistence of traditional marriage norms in Indonesia. In other words, family pattern in a society is not only influenced by its socioeconomic condition or modernization level, but also by its tradition. It was path-dependent on its historical legacy.

#### Family Values in China

Modal patterns of family life in China were very different in many ways from those in the West in late imperial times. The family was a crucial unit of economic production and socialization. It was also hierarchal, authoritarian, and patrilineal, embodying a strict sexual and generational division of labor. There was a cultural preference for extended families. The parent-son relationship is the central characteristic of Chinese family life and has superiority over all other family relations, including conjugal ties. Sons have equal claim to inherit family property. Kinship relations were patrilineal and patriarchal. Marriage tended to be strictly arranged. Family obligations were overwhelmingly emphasized. Family loyalty and obligations take precedence over other loyalties and obligations. China's Confucian family ideology was highly pronatalist, and the suppression of female talent that resulted from the patriarchal nature was more severe than in Western societies. (Fei 1947; Levy 1949; Feuerwerker 1958; Freedman 1966; Jenner 1992; Whyte 1996)

On the other hand, Communist revolution and radical socialist construction from 1940s to 1970s lead to substantial change in Chinese family life. Gender equality is one of the core aims of the revolution. As a result, patriarchy kinship relations and women's subordinate status in traditional Chinese family were attacked fiercely. People were required to abandon unequal gender relations because it was seen as a legacy of feudalism. During this time period, women have gained radical new freedoms: right to divorce, freedom in mate choice, equal rights of property ownership, and access to a wider variety of work opportunities. (Davin 1976) Women stepped outside of family and participated in labor force. They got relatively equal payment for equal work, and trained for leadership roles.

Communist revolution has not changed the superiority of family in Chinese social life though. Obedience is still highly valued. Ancestor worship is still predominant in many parts of China. Nor did it totally demolish the unequal hierarchical and patriarchal generational relationship. Since reform era, there is a resurgence of innatist thinking in China with the resurrection of the Confucian ideal of the "virtuous wife and good mother." Women were more likely to be held uniquely responsible for marriage, family, and child than in the Maoist period, and the home was being redefined as a crucially important place. (Pimental 2006) Decades of Communist revolution may set up egalitarianism in the work value, but not family values. (Chang 1999) Contemporary China may be experiencing a form of "backlash" with young men hold less egalitarian gender orientations than earlier generation and their peer young women. (Pimental 2006)

Consequently, Chinese attitude of family and gender relations can be quite complex. On one hand, with economic development, education expansion, and egalitarianism promoted by the communist government, people may have an equal and "modern" attitude on family manners. People with higher education and better access to mass media may have stronger beliefs in developmental idealism, which argued by Thornton as important mechanisms of DI dissemination. They may embrace the individual rights of freedom and equality, the principle of consent on social relations. They may prefer a "modern" family based on love match (possibly a nuclear family) and have high regard for women's autonomy and rights.

On the other hand, it is also likely that, traditional and hierarchical family relations have never been fully abandoned, and it resurrects with a loosened state control over personal life and a resurgence of traditional culture when Chinese try to recapture their identities in a globalization era. Under such conditions, perceptions of division of labor inside family can still be highly gendered where being good wife and mother is much more important for women's fulfillment. Women are less likely to go to work, and have to take the interests of family members with highest priority. Both situations are possible, so now I will turn to attitudes on family and gender relations in contemporary China.

#### **DATA, METHOD and MEASURES**

#### Data

Data for this study came from World Value Survey (WVS), a global research project that explores people's values and beliefs, how they change over time and what social and political impact they have. Measures of WVS include support for democracy, tolerance of foreigners and ethnic minorities, support for gender equality, the role of religion and changing levels of religiosity, the impact of globalization, attitudes toward the environment, work, family, politics, national identity, culture, diversity, insecurity, and subjective well-being. WVS starts from 1981 and now it is the only source of empirical data on attitudes covering a majority of the world's population.

There have been five waves of WVS. China participated in four of them. China's first wave was conducted in 1990, and then followed by waves in 1995, 2001 and 2007. The 1990 wave was conducted by China Statistical Information and Consultancy Service Center with a total sample size of 1,000. The 1995 wave was conducted by Gallup China with a total sample size of 1,500. Both the 2001 and 2007 were conducted by Research Center for Contemporary China in Peking University. The 2001 wave contains 1,000 observations and the 2007 wave contains 2,015 observations. All four waves are nationwide representative samples. For the purpose of this study, I will only look at 1995 and 2007 waves. The 1990 wave was given up for it didn't provide information on population's access to mass media. The 2001 wave was given up because the time interval between it and the other two waves is not long enough to expect significant change on values and attitudes. In the end, with waves in 1995 and 2007, I get a time span of twelve years. Because this study focuses on attitude on family and gender relations, I will look at measures on gender equality, attitudes on marriage, parenthood, and women's participate in labor force.

# Measure

After comparing questions in 1995 and 2007, six questions were selected to measure attitudes related to family and work. Participants were asked to decide whether they agree/disagree on or approve/disapprove of these six statements: *job scarce*: "When jobs are scarce, men should have more right to a job than women"; *child needs mother* and father:"A child needs a home with both a father and a mother to grow up happily"; marriage institution: "Marriage is an out-dated institution"; single mother: "A women wants to have a child as a single parent but she doesn't want to have a stable relationship with a man"; *housewife vs. work*: "Being a housewife is just as fulfilling as working for pay"; university education: "A university education is more important for a boy than for a girl". Participants were asked whether they are strongly agree, agree, disagree or strongly disagree on housewife vs. work question and university education question. I recode these two variables into only agree and disagree. Participants were asked if they "agree, depend, or disagree" on single motherhood, and I treat the "depend" category as missing data. Participants were asked if they are agree, disagree, neither agree nor disagree on the job scarce question. Similarly, "neither agree nor disagree" is treated as missing. In the end, I get six dichotomous variables measuring attitudes on family and work with more liberal and equal view coded as 1 and more conservative view coded as 0.

Thornton (2005) discussed four propositions of DI: (1) the modern society is good and attainable; (2) the modern family is good and attainable; (3) the modern family is a cause as well as an effect of a modern society; and (4) individuals have the right to be free and equal, with social relationships being based on consent. Modern family is defined as "a social system with many nonfamilial elements, extensive individualism, many nuclear households, older and less universal marriage, extensive youthful

autonomy, marriage largely arranged by the couple, affection in mate selection, and high regard for women's autonomy and rights." WVS does not provide a full range of measures on DI, however, the six dichotomous variables I get above are good measures on the second and fourth propositions of DI since they provide information on people's perceptions on individualism, youth autonomy, women's autonomy and rights, and individual's right to be free and equal. So I add these six variables together to generate a new variable *DI belief* ranging from 0 (no belief) to 5 (strong belief).

WVS also provides two measures of DI dissemination mechanisms, education and access to mass media. Education was measured as the highest education level of the respondent, ranging from incomplete elementary school (1), complete elementary school (2), complete vocational secondary school (3), complete college-preparatory secondary school (4) until college and above (5).

Access to mass media was measured differently in 1995 and 2007. In 1995, the question asked "Do you watch TV? If you do, on average how many hours will you watch TV per day?" with answering categories "do not watch TV" (1), "1-2 hours per day" (2), "2-3 hours per day" (3), and "more than 3 hours per day" (4). In 2007, the question was phrased as a series of questions including whether the respondent used daily newspaper, news broadcasts on radio or TV, printed magazines, in depth reports on radio or TV, internet or email to obtain information during the past week with answering categories as "used" or "did not use". I add up these five questions again to get a new variable *media access* ranging from 0 (did not use any one) to 5 (used all five).

Demographic variables: Age, sex, year of birth, and marital status are included in the analysis as demographic variables. Observations in 1995 sample age from 18 to 87, while in 2007 sample, age starts from 18 but ends at 70, so I exclude people aged over 70 from the 1995 sample. Because I want to look at change of family attitudes across generation, people are further classified into birth cohorts to get rid of age effect. The 1995 sample contains people born from 1925 till 1977, while the 2007 sample contains people born from 1937 to 1989. In order to compare people born in the same time interval, I exclude those who were born earlier than 1937 or later than 1977, and divide them into three birth cohort: people born before the establishment of People's Republic of China (1937—1949); people born in the early socialist construction period until the end of the famine during the Great Leap (1950–1961); people born before and during the culture revolution (1962–1977). In the end, I get 1,461 people in 1995 and 1,753 people in 2000. Table 1 is shows the distribution of birth cohort in 1995 and 2007. Around 20 percent of the observations were in the first birth cohort, 30 percent in the second birth cohort, and 47 percent in the third birth cohort.

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Table 1 around here

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Method

The data I use here is cross-sectional. However, because I am looking at two waves across twelve years, I can show change of attitude patterns through the years. Besides, using information on year of birth, I can also show attitude differences across generations. I begin simply by documenting distribution of education and access to mass media in the population across time and birth cohort. Then I will show attitude changes on family across time and generations. Third, I will run an OLS regression using education and mass media as indicators to predict DI beliefs. I ask whether educational attainment and access to mass media significantly affect beliefs of DI, and whether beliefs of DI—beliefs on modern family and individualism—is patterned differently across cohorts.

# RESULT

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Table 2 around here

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Trends in Education and Access to Mass Media

Table 2 shows trends in education attainment and access to mass media in 1995 and 2007 by birth cohort. Overall, there is an increase of education attainment after twelve years. More people complete college-preparatory secondary education: 21.8 percent in 1995 increases to 26.3 percent in 2007. Also, there is a 0.4 percent increase in college or above education. On the other hand, more people didn't finish their elementary education in 2007 compare to 1995, while fewer completed vocational secondary education in 2007. Besides, there is a cohort effect on education attainment. Later birth cohorts are more likely to have better education attainment with significant correlation coefficients in both years. In other words, from 1995 to 2007, people born from 1962 to 1977 have a more rapidly increasing education attainment than earlier birth cohorts. Because World Value Survey measures mass media access differently in 1995 and 2007, I need to look at them separately. In 1995, watching TV seems already a common lifestyle: only 11 percent of the respondents do not watch TV on average in week days. Chi square test is not significant between birth cohort and watching TV hours, showing that birth cohorts do not affect people's behavior of watching TV significantly, although we do see that younger cohort tend to watch TV a little bit longer.

WVS 2007 collects population's access to various mass media during the past week. Radio and TV are quite predominant way for obtaining information in 2007. 75.1 percent of respondents report receiving news broadcasts on radio or TV during the past week, and 53.9 percent of them have received in depth reports on radio or TV. Daily newspaper is the third highest news channel with 21.5 percent, followed by printed magazines. Internet or email is the least common way of receiving information with the lowest percent, 8 percent. Younger cohorts have higher percents of using almost every kind of mass media than older cohorts (except printed magazine between early construction birth cohort and before 1949 birth cohort), which means younger generations have better access to media than the older generations in all possible ways.

The variable *media access last week* shows the mean value of the sum of the previous five measures. It indicates that younger generations do have access to mass media more often than older generations. Besides, 13.1 percent of the youngest generation has used internet or email to receive information, a much higher percent than the two older generations. Considering the importance of internet in contemporary world, and the widespread information of western modernization ideals over the internet, people born between 1962 and 1977 have a very big advantage compare with earlier cohorts in

terms of getting information. At the same time, they are far more likely to be influenced by modernization ideologies and developmental idealism.

#### Trends in Attitudes

People's attitudes on work and family also change over time and across cohorts. Table 2 only shows percent of people holding a more liberal/gender equal view on attitude questions about family and work, but since these six variables were recoded earlier as six dummies, we can get information of the other half respondents as well. Job scarce measures perceptions on equality of work opportunity between men and women when there were inadequate jobs. Child needs mother and father asks if only with both parents in the household can a child grew up happily, so it can be seen as a measure of single parent tolerance. *Marriage as outdated institution* asks people's ideas on marriage. Single motherhood asks if women can be a single mother without stable relationship, which tests people's recognition of the legitimacy of single motherhood. Housewife vs. work asks if being a housewife is as fulfilling as working, which reflects women's role conflicts between family and work. University education for women asks if university education is more important for boy than girl, which measures believes on gender equality of higher education opportunities. Overall, around or over a third of respondents have liberal/modern views on equal work opportunity, women's fulfillment outside family and women's higher education opportunities.

However, from 1995 to 2007, it seems that less people hold more liberal/equal attitudes on work and family. Variable *DI belief*, which is the mean of the sum of the six dummies, indicates this change by a decrease from 2.2 to 1.6. Although more people

think that marriage is an outdated institution, and more people saying yes to women's higher education opportunity, all the other four variables have decreased percentages of liberal views over the twelve years. There is a 7 percent decrease of people supporting equality of work opportunity between men and women, a 6.6 percent decrease of tolerance of single parent household, a 35 percent decrease of recognizing the legitimacy of single motherhood, and a 3.1 percent decrease of supporting women's fulfillment outside family. Pimental (2006) mentioned a backlash in gender ideology in China, but it seems that not only family values have been more conservative, but also work values have been more conservative.

Differences on family and work attitudes among birth cohorts are quite complex. In 1995, younger generations are more likely to agree on marriage as outdated institution and to support women's fulfillment outside family, but they are less likely to support university education for women. There are no general trends on the other three variables. There is a decrease from before 1949 cohort to early construction cohort on equal work opportunity and tolerance of single parenthood, but an increase on both questions from early construction cohort to the youngest cohort. On the contrary, tolerance on single motherhood increases from oldest to early construction cohort, but then decreases in the youngest cohort.

Patterns in 2007 are somehow different. Equal work opportunity is the only variable that follows the same pattern in 1995 where the early construction cohort has lowest percent of supporting equal work opportunity. Interestingly, in 2007 the youngest cohort is the cohort has the lowest percent of claiming marriage as outdated institution. The percents of respondents supporting women's fulfillment outside family and equal

higher education opportunity are almost the same across three birth cohorts. And there are increases on single parenthood tolerance and single parenthood tolerance.

So we can see that from 1995 to 2007, there are changes on people's attitudes on family and work, but the patterns are not constant during these twelve years. In order to better understand the mechanisms of attitude change, I turn to construct regression models predicting DI beliefs using education and mass media access in 1995 and 2007 separately.

OLS Regression

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Table 3 around here

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Table 3 is the OLS regression model predicting DI beliefs using education attainment, media access and birth cohort in 1995 and 2007. Because access to media were measured differently in 1995 and 2007, watching TV was used to measure media access in 1995, while the recoded scale variable media access last week was used to measure it in 2007. Unfortunately, both of the models do not fit well. Media access is not significant in both years. The only significant variable is education attainment in 2007, which indicate a 0.11 increase of DI beliefs by one unit increase of education attainment.

Dummy variables birth cohorts are not significant as well. It seems that there is no cohort effect on their DI beliefs. Models (not shown here) predicting the six attitude dummies separately using logit regression also indicate that there is little or no significance of education and mass media on family and work attitudes. According to

modernization theory, we can expect an increase of DI beliefs with an expansion of education and mass media, but in our study, although we have seen an expansion of education attainment and mass media access over time and across cohort, and a change in people's perception of family and work, there is little or no correlation between them.

#### Limits

There are several possible limitations in our analysis. Although World Value Survey is the best empirical data I can find on values and attitudes, it is not a survey designed to measure developmental idealism. As stated previously, there are four core proportions of DI with each of them containing a wide range of ideas and beliefs, so that I might need a better measure of DI. Second, limited by WVS, I was only able to use education and mass media access to approach mechanisms that might increase DI, but there are other mechanisms that I am not able to include in this analysis. It is very likely that the changes of DI that have been seen over the years are also influenced by other mechanisms, and further research is needed on the subject. Third, I have not separate men from women in our analysis. There might be a systematic difference between genders in their attitudes on family and work, but that is beyond discussion of this study.

#### SUMMARY AND CONCLUTION

In this study, I analyzed change of attitudes on family and work, and its relationship with education and mass media access. From 1995 to 2007, there is an expansion of education and mass media access in China, and also a change of attitudes on family and work. However, it seems that in contemporary China, change in beliefs on DI is not associated with the expansion of education and mass media. According to

modernization theory and developmental idealism, developing societies may expect an increase of individualism and an embrace of western, "modern" family ideology. We do see increases on some measures, such as supporting of equal education opportunities and attitudes on marriage, but that is certainly not the general trend.

Even more interesting is the change of behavior patterns in China over the years. Some indicators of second demographic transition have already been seen in China. Divorce rate is increasing (Zeng and Wu 2000). People are more tolerant on premarital sex and cohabitation. From earlier discussion we may expect that the mechanisms lead to these demographic changes in China are also largely different from what modernization theory or demographic transition theories suggested. It is likely that those mechanisms are still working, but in a much more complex way when they interact with traditional Chinese family values and communist legacies.

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	1995		2007	
Birth Cohort	Ν	(%)	N	(%)
Before 1949	260	19.4	398	22.7
Early Construction	446	33.3	527	30.1
1962 to Culture Revotion	633	47.2	828	47.2
Total	1,339	100	1,753	100

Table 1 Percent Distribution of Birth Cohort, 1995 to 2007

Source: World Value Survey (China part), wave three and wave five.

	1995				2007			
	Birth Cohort				Birth Cohort	_		
Variables	Before 1949	Early	1962 to CRev	Total	Before 1949	Early	1962 to Crev	Total
Education Attainment								
Incomplete elementary	27.8	20.9	8.9	16.5	44.9	33.2	19.8	29.6
Complete elementary	25.1	31.5	33.3	33.1	30.7	27.8	26.7	27.9
Complete vocational secondary	16.9	25.1	27.2	24.5	7.1	11.7	14.1	11.7
Complete college-prep secondary	15.1	20.9	25.1	21.8	13.7	25.9	42.7	26.3
College and above	5.1	1.6	5.5	4.1	3.6	1.3	6.9	4.5
	N=1,336, χ2=	N=1,336, $\chi$ 2=75.5, df=8, p=0.000, r=0.1846*				N=1,729, $\chi$ 2=131.6, df=8, p=0.000, r=0.2544*		
Mass Media								
TV Watching								
Do not watch TV	11.6	11.9	10.2	11.1				
1-2 hours per day	50.2	52.3	44.8	48.3				
2-3 hours per day	24.7	23.6	28.7	26.2				
more than 3 hours per day	13.5	12.2	16.4	14.4				
	N=1,331, χ2=	10.4, df=8, p	=0.111					
Mass media for information last week								
Daily newspaper <sup>a</sup>					17.1	16.4	26.8	21.5
News broadcasts on radio or TV <sup>a</sup>					69.5	74.0	78.4	75.1
Printed magazines <sup>a</sup>					10.0	9.2	20.0	14.5
In depth reports on radio or $TV^a$					46.8	50.5	59.4	53.9
Internet or email <sup>a</sup>					2.3	4.2	13.1	8.0
Media access last week <sup>b</sup>					1.4		2.0	
Media access last week					1.4	1.5	2.0	1.7
Attitudes on Family and Work <sup>c</sup>								
Job scarce	36.5	32.9	40.4	37.1	32.0	27.0	32.2	30.1
Child needs mother and father	6.9	6.5	12.8	9.5	1.0	3.3	3.6	2.9
Marriage as outdated instituion	6.9	8.3	9.0	8.4	10.9	14.4	12.5	12.7
Single motherhood	39.1	46.7	38.0	41.1	4.4	5.8	7.2	6.1
Housewife vs. work	29.4	30.1	32.0	31.1	27.8	28.7	27.6	28.0
University education for women	80.1	76.7	75.2	76.7	79.8	77.2	79.1	78.7
DI belief <sup>b</sup>	2.2	2.3	2.2	2.2	1.7	1.6	1.6	1.6

 Table 2 Percent Distribution of Education, Mass Media and Attitudes on Family and Work by Birth Cohort, 1995 and 2007

Note: <sup>a</sup>. Only report percent of people who have used these mass media in the past week.

<sup>b</sup>. Report mean.

<sup>c</sup>. Only report percent liberal/equal responses.

Source: World Value Survey (China part), wave three and wave five.

# Table 3 OLS Regression Estimates of Education and Mass Media Access on DI Beliefs<sup>a,b</sup>

	1995	2007
Education	0.05	0.11**
Mass Media Acess		
TV Watching	0.03	
Media Access Last Week		0.03
Birth Cohort		
Before 1949	0.03	0.09
(Early Construction)		
1962 to Culture Revotion	0.15	-0.004
Constant	2.70**	2.71**
F test	2.77**	5.30**
R Square	0.01	0.02
N	1129.00	1101.00

Note:<sup>a</sup>. DI Beliefs here only contains variables on job scarce, child needs father and mother, marriage as outdated institution, housewife vs. work and university education for women. Single motherhood is

<sup>b</sup>. Pooled model with dummy 1995 and 2007 were constructed then

given up as both 1995 and 2007 were insignificant.

Source: World Value Survey (China part), wave three and wave five.