

How Reproductive Behavior Affects People's Happiness

— Evidence from Survey Data of 106 Cities in China

It is well known by economists that childbearing is the outcome of utility maximization by individuals or couples. Therefore, understanding how having children influences the parents' happiness has great potential to explain fertility behavior. Previous studies using data of Europe and North America, such as Britain, Germany and USA, find that reproductive behavior has negative effects on people's happiness, and the adaptation to birth of a child appears to be rapid and complete. Based on survey data of 106 cities in China, we analyze the relationship between Chinese reproductive behavior and happiness. The result is inconsistent with that of the previous studies.

Firstly, regardless of the sex of children, the effects of reproductive behavior on happiness is nonlinear. Specifically, compared with those without children, people with only one or two child(ren) is happier, while those with three or more children appear to be worse off.

Secondly, as is well known, sons have long been preferred over daughters by Chinese families. The results show that people having a son usually are happier than those with no children or only a daughter or daughters. At the same time, people having both sons and daughters are happier than those with only boys or girls. Especially, people having two sons and two daughters are happier.

Thirdly and most interestingly, children's birth order by sex have significant impact on parents' happiness. When having the same number and sex ratio of children, people whose first child is a son are happier than people whose first child is a daughter.

Finally, we find no complete adaption to birth of child. Especially, happiness increases monotonically with the number of years after the birth of child. It seems to show that the phenomenon of adaptation to birth of child may be not a general one, and the social contexts and home policy may be important for the adaption.

The results suggest that “two children” policy and promotion of gender equality may help to improve the level of happiness, but completely autonomous reproductive behavior may make people unhappy; Some special populations such as “shidu” families should be given institutional supports.

TABLES:

Table 1: Happiness and the number of children. Linear Regression

	All	Men	Women	Married	Divorced	Widowed
Number of Children (None is Reference group)						
1	.041**	.041	.038	.043*	.087	.419
2	.069***	.084***	.049	.076***	.287	.236
3	.072**	.064	.077	.084**	.233	.097
4+	-.015*	.149	-.175***	-.017	1.518	.832
R ²	.051	.051	.052	.053	.096	.157
N	119162	60240	58922	94036	1415	389

NOTE: Controlling for sex, income, marital status, region, and city.

Happiness is measured on a linear scale from 0 (not at all happy) to 10 (most happy).

*** p<.01 **p<.05 *p<.10

Table 2: Happiness and the sex of children. Linear Regression

sex structure of children	All	Men	Women	Married	Divorced	Widowed
one son	.059***	.066**	.048	.060***	.117	.335
one daughter	.016*	.001	.025	.018	.045	.563
two sons	.040	.064	.013	.053*	-.094	-.091
two daughters	.055*	.074*	.034	.065**	.133	-.058
one son and one daughter	.079***	.094*	.059*	.085***	.374**	.353
three sons	-.119	-.049	-.200	-.124		1.073
two sons and one daughter	.096**	.127*	.061	.104**	1.073	.293
one son and two daughters	.070*	.040	.099**	.090**	-.120	-.366
three daughters	.073	.051	.098	.089	-.956	1.391
four sons	-.452	.050	-.779	-.421		
three sons and one daughter	.055	.468*	-.461**	.049		1.355
two sons and two daughters	.241**	.318**	.163	.226**	4.536**	.520
one son and three daughters	-.124	-.003	-.249*	-.121	-1.473	1.105
four daughters	-.602**	-.421	-.732**	-.582*		-.295
R ²	0.051	0.051	0.053	0.054	0.105	0.171
N	119162	60240	58922	94036	1415	389

Table 3: Happiness and the birth order of children by sex. Linear Regression

birth order by sex	All	Men	Women	Married	Divorced	Widowed
MF	.076***	.094***	.053*	.082***	.415**	.276
FM	-.113	-.054*	-.182*	-.115		1.329
MMF	.208***	.181**	.233**	.207***	2.299	2.412**
MFM	.091	.196**	-.014*	.125	.082	-1.080
FMM	.073	.069	.080	.087	.600	.129
MFF	.112	.042	.187	.166**	-1.281	-2.634**
FMF	.070	.026	.112*	.089**	.062	.168
FFM	-.446	.044	-.762	-.412		
R ²	.051	.051	.053	.054	.107	.205
N	119162	60240	58922	94036	1415	389

NOTE: M: male F: female MF: the first child is a son, and the second a daughter.

Table 4: Adaptation effects to birth of the first child. Linear Regression

years after birth of the first child	All	Men	Women	Married	Divorced	Widowed
0	.081**	.063*	.107***	.079*	1.204*	
1	.098***	.146***	.063	.097***	1.224*	
2	.063*	.05	.082*	.058*	1.795**	1.543
3	.112***	.132***	.105***	.110***	1.392**	0.181
4	.098***	.121***	.088*	.090***	1.901***	
5-17	.180***	.227***	.146***	.177***	1.468***	0.640
18+	.214***	.256***	.197***	.201***	1.784***	0.622
N	53178	26164	27014	52016	886	186
R ²	.053	.055	.053	.051	.122	.207