# A Cross-Temporal Meta-Review of Fertility Preferences in China.

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## **Background**

China's fertility rate is currently estimated to be between 1.4-1.6; however period TFRs in certain urban settings such as Beijing and Shanghai are some of the lowest ever recorded, falling as low as 0.6. In this context, China as a nation is ageing rapidly. As the population of urban centres become increasingly less able to 'reproduce themselves', there is a 'floating population' of over 200 million workers from rural to urban areas. However, in the context of lower fertility in the sending (rural) areas, wage inflation is threatening China's position as the 'factory of the world.'

In recent years, scholars have increasingly called into question the claim that the fall to low fertility in China was primarily driven by family planning restrictions; instead that economic development, urbanisation, and the development of improved educational and employment opportunities. In this view, China – and urban areas in particular – share more in common with other low fertility settings in Pacific Asia than perhaps previously recognised. The 'Low Fertility Trap Hypothesis' suggests that if fertility stays low for a prolonged period, a series of mutually-reinforcing demographic, economic and sociological mechanism serve to make the future increase of birth rates harder.

Fertility preferences, as measured through ideal or intended number of children have been employed by demographers in a variety of ways. In Europe, fertility preferences have invariably been higher than actual fertility, suggesting that under certain policy/economic conditions birth rates could be raised. Such preferences also give a broad impression of general attitudes towards family sizes and help to test whether there are particular societal 'norms' (such as a 'two-child norm').

While mean ideal family sizes in Europe tend to above replacement-level, some recent studies have identified sub-replacement ideal family sizes in low fertility Pacific Asian settings such as Hong Kong and Taiwan. Furthermore, a number of studies have concluded with similar findings for China.

### **Research questions**

How many children Chinese people would like to have if having more than one child is allowed? What would the fertility rate be? How reliable are surveys of fertility ideals and intentions.

## Methodology

A retrospective approach can be adopted to understand the changing process of people's fertility intentions, by asking respondents' fertility intentions in different years. However, restricted by factors such as the limitation of memory, and the change of attitude because of experiences, the retrospective research could have large measurement error that harms the accuracy and objectivity in reflecting the intention of fertility at a certain period. In this sense, archive research has an obvious advantage on retrospective research in terms of validity and plausibility. Over the past 30 years, Many government sectors, universities and scientific research institutions such as the National Health and Family Planning Commission, the National Statistics Bureau, All-China Women's Federation, Renming University, Chinese Academy of Social Science, China Population and Development Research Center have conducted large numbers of researches on Chinese people's fertility intention. Each research is an independent temporal sampling of a certain historical period. The changing process of fertility intentions could be pictured by integrating the results of these researches using archive research method.

Some scholars describe these research results qualitatively, some use statistical tables to list the past results on fertility intention, others display the results one by one with bar charts. Statistical tables are comparatively clearer than words, and more vivid than bar charts when displaying the patterns. However, the number of studies focusing on fertility intention is increasing exponentially. Describing all the literature using qualitative research methods is becoming more and more difficult, and the patterns are no longer clear when listing hundreds of research results in a statistic table or a bar chart. With the growing number of literature, the importance of quantitative research methods becomes obvious. Meta-analysis, as a quantitative research method on literature developed by Glass in 1976,

focuses on contrasting and combing results from different studies, in the hope of identifying general patterns among in the context of multiple studies.

Many Meta analyses found that the year of data collection is correlated with the research results. Twenge in 1990 developed a special meta-analysis skill to solve the "tempo effect" – "Cross-Temporal Meta-Analysis". This research method tracks each research over a period of time, examines the changing patterns of the mean value of the dependent variables, and can analyze the causes of the differences in each research. This study adopted cross-temporal meta-analysis methodology, collecting results on fertility intention researches from 1980-2011, putting them together in the order of time, examining the developing patterns of fertility intention since 1980, in the hope of finding out how fertility intentions changes with times.

#### **Indicative results**

It is revealed from 227 different investigations conducted by different researchers in different areas, applying similar or related measurements on the question of "how many children on earth that Chinese people want to have?" that the desired number of children has been decreasing from 1980 to now. After 2000, the prevailing fertility intention is to have one boy and one girl, and the average desired number of children is between 1.62-1.75. As the below table shows, in the most recent period for both urban and rural areas combined, 85% of respondents report a desire for less than 2 children.

	Ideal number of children (%)				Mean	SD	95% confidence interval	
	1-1.49	1.5-1.99	2-2.09	2.1 and above	(children)	(children)	min	max
Total	23.3	47.1	8.8	20.7	1.83	0.45	1.77	1.88
1980-1989	9.1	31.8	9.1	50.0	2.13	0.50	1.98	2.28
1990–1999	20.7	43.1	3.4	32.8	1.90	0.47	1.77	2.02
2000–2011	29.6	54.4	11.2	4.8	1.69	0.36	1.62	1.75

The population fertility desire between rural and urban area, as well as between only-child and nononly-child is becoming more and more similar. The intended number of children is significantly negatively related to the economic and educational development level, while is positively related to the policy.

Finally, in the paper we perform an extensive validation exercise, and conclude that while some some under-reporting is likely, there is strong evidence to support the evidence of sub-replacement fertility ideals.

#### **Conclusions**

If China relaxes its one-child policy by allowing families to have two children, it is likely that more than half of the population would consider having a second child. Given the influences from economy, education and policy, etc., probably only a few people would actually have a second child, and these kind of people are very likely to have a strong desire to have one boy and one girl.