

Fertility Intentions of China-born women and men in Australia

Feier Chen
Australian National University
School of Demography
Feier.Chen@anu.edu.au

Fertility intentions are often influenced by personal, cultural, social and policy contexts. International migration serves as a locational and cultural transition process, reflecting different fertility patterns according to different countries of birth and migration experiences. However, there is a limited body of literature that delves explicitly into the fertility intentions of China-born migrants. As such, this research seeks to understand the factors that affect China-born migrants' fertility intentions in Australia. It also explores whether there are gender differences regarding fertility intentions. The study employs a snowball sampling survey design to collect data from Chinese residents in Australia. It is expected that China-born women exhibited lower fertility intentions than China-born men, potentially due to cultural norms, migration and integration challenges. China-born men are expected to show a greater adherence to Chinese cultural norms than China-born women. Using a regression model, this study intends to reveal that socioeconomic factors such as age, education level, and marital status play significant roles in shaping fertility intentions. These insights will significantly enhance the Chinese community's broader discourse on reproductive desires, life trajectories, and integration into society.

Extended Abstract

1. Introduction

Fertility intention has long held a central role in demography, as it seeks to investigate the family planning and formation choices made by individuals and households. Fertility intentions are often influenced by personal, cultural, social and policy contexts. International migration serves as a locational and cultural transition process, reflecting different fertility patterns according to different countries of birth. This raises questions about the theoretical frameworks surrounding fertility intentions and how they apply to migrant populations. Given this context, this research intends to fill the gap by looking at China-born's fertility intentions in Australia.

2. Theoretical Framework

This research combines theories that are related to fertility intentions and migration. Miller's theory of traits-desires-intentions-behaviours (TDIB) model indicates a comprehensive theory to understand childbearing motivations. Miller (2012, p. 23) argues that TDIC has formulated an interdependent relationship with others, contending that their significant others influence individuals' intentions. At the same time, intentions are formed by situational considerations, emphasising the cost-and-effect of childbearing (Miller & Pasta 1995, p. 532). As such, if we apply this theory to migrant groups, it allows us to understand and explain how migrants formulate their fertility intentions through their childhood experiences and how significant others influence these expectations. It also enables the investigation of intergenerational comparison and their economic status. Therefore, the theory of traits-desires-intentions-behaviours reveals that an individual's fertility intentions can be traced back to childhood, and the external environment and significant others also affect fertility intentions.

The adaptation theory further addresses the migration duration, which leads to a convergence towards host countries' fertility norms and patterns. Dubuc (2018, p. 273) asserts that the length of migration is a critical factor affecting migrant women's fertility intentions. Migrant women's behaviours change to coverage with the local's fertility decisions and behaviours (Harrison et al., 2023, p. 278). Under this condition, some necessary life experiences, such as education, labour force participation, and housing, can structure norms and decision-making (Harrison et al., 2023, p. 278). The earlier women migrate to one country, the more likely they will display local-like family planning and formation (Harrison et al., 2023, p. 278). Therefore, the adaptation has provided more insights into how and why migrants converge their fertility behaviour to host countries.

With limited literature on Chinese immigrants' fertility decisions, a low fertility rate is still one common fertility trend among Chinese immigrants in different host countries. The existing literature related to Chinese immigrants' fertility is primarily located in Canada and the United States, where both countries' research outline that Chinese immigrants have lower fertility in their countries as compared with the natives' fertility (Nie & Baizan 2021; Woldemicael & Beaujot 2011; Adsera & Ferrer 2016; Zhao 2019). Woldemicael and Beaujot (2012, p. 338) argue that compared with other migrant groups in Canada, Chinese migrants prioritise their socioeconomic status integration into society to reduce their fertility intentions. Tang's research reveals that Chinese migrants' son preference influences their fertility pattern, especially in deciding on a second birth; on the other hand, American-born Chinese would show no sign of son preference (Tang 2013, p. 273). This cultural factor increases with age; in other words, younger Chinese are less likely to have a preference for their sons as they are more attached to new ideas (Tang 2013, p. 273).

3. Preliminary Findings

Total Fertility Rates Change Over Time

Women from different countries have various fertility in Australia (Baffour et al. 2020, p. 52; Gray et al. 2022, p. 19). Unlike other countries and regions, such as the United States and Europe, migrants in Australia display an overall lower fertility rate than the Australia-born, which makes Australia stand out among those migrant countries (Baffour et al. 2020, p. 51). Over 1/3 of the newborns' mothers are born overseas (Gray et al. 2022, p. 18). The TFR for all migrant women is 1.592, while Australia-born women's TFR is 1.669 (ABS 2021).

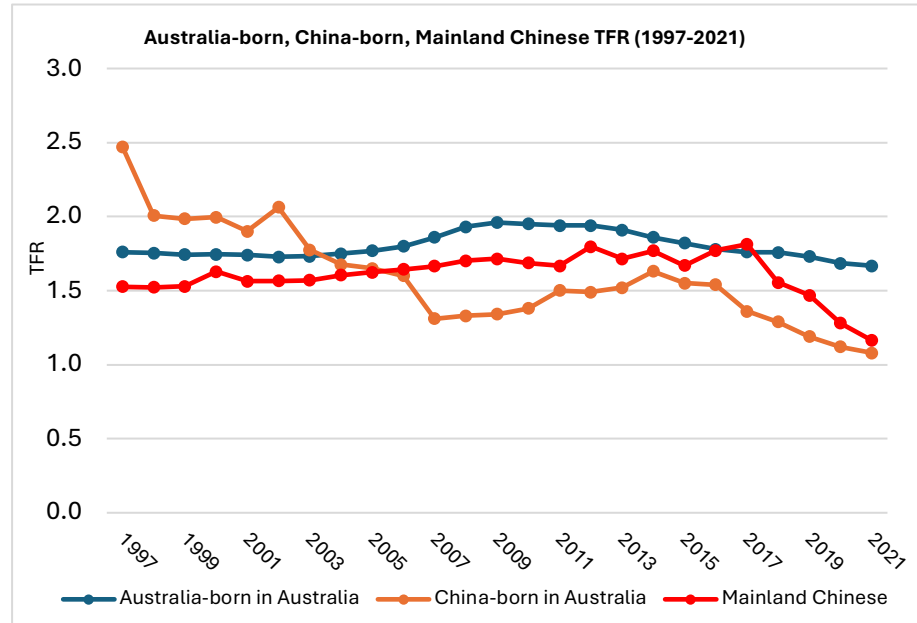


Figure 1: TFR for Australia-born, China-born and mainland Chinese (1997-2021)
Source: ABS, Births, by Country of Birth of Parent (2021); World Bank (2021)

Figure 1 illustrates Australia-born and China-born women's TFR from 1997 to 2021.

China-born mothers' TFR has experienced a dramatic decrease compared with Australia-born women. In contrast, Australia-born women's TFR change is smoother and smaller. From 1997 to 2001, the TFR of Australia-born women had

little change, which remained at around 1.75. Since 2001, their TFR has gradually increased, reaching its peak in 2009. When we look at China-born women in Australia and Chinese women's TFR, we can observe that before 2005, China-born women's TFR was higher than that of Chinese women. After 2005, China-born in Australia was lower than Chinese women's TFR. But in 2021, these two groups' TFR are very close to each other.

4. Data collection and analysis

4.1 Research Design and Data Collection

From Figure 1, we can notice that China-born has a lower fertility rate than Australia-born and even lower than mainland China's fertility rate. I used HIDLA Wave 14 to 19 to run two fixed-effect models, and the results indicated statistically lower fertility intentions of the China-born migrants. However, the sample size of the China-born is only 198 across six waves, which cannot provide further details of whether there is a gender difference and which factors affect China-born's fertility intentions. Another crucial limitation of HIDLA is that it cannot provide cultural questions related to China-born migrants. As such, primary data gathering is essential to dive into China-born migrants' experiences and needs for family building. Therefore, I designed a survey to recruit China-born and Chinese-heritage participants aged 18 to 44 residing in Australia.

The survey collects data on participants' sociodemographic characters, employment and time use, migration history, plans of having children, and their attitudes towards having children. This survey is open for both men and women to participate and men is the comparison group

to investigate. I have spread the survey on different social media platforms, including WeChat, Instagram, Facebook, and RedBook. This research had been approved by the ANU Human Ethics Committee (Protocol 2023/1463). All the surveys were completed online, and every participant had the chance to read the Project Information Sheet, which indicated the research objectives fully. The data collection is still ongoing but has currently received around 780 responses; after excluding missing responses, it has 613 respondents in total, including 153 men (25%) and 460 (75%) women.

4.2. Data Analysis

In order to test whether there is a gender difference in the fertility intentions of China-born migrants, I first explore the fertility intentions question by sex. The fertility intention is measured by the question “How likely to have a child/children in the future? (Pick a number from 0 to 10)”. The result is shown in Table 1. In this table, 0 represents the most unlikely to have a child/children in the future, and 10 represents the most likely to have a child/children in the future. The table indicates that a large proportion of men and women are not willing to have a child/children in the future. In particular, 34.59% of women have the least desire to have children in the future, and 25% of men respectively. The overall mean for fertility intentions is 3.24, which shows a moderate willingness to have children in the future. From the table, it makes me wonder if there is a statistical difference between men and women.

Fertility Intentions	Women	Men	Total
0	138	34	172
1	70	17	87
2	34	17	51
3	19	4	23
4	14	3	17
5	25	12	37
6	21	8	29
7	18	10	28
8	15	6	21
9	8	4	12
10	37	21	58
Total	399	136	535

Table 1: Cross-tabulation of sex and fertility intentions

To test the statistical difference in fertility intentions between men and women, I undertook an independent sample t-test, as shown below (Table 2). Table 2 shows that the mean fertility intention for men is 4.022, and for women is 2.982. The mean difference is 1.04, which is also statistically significant, indicating a significant difference between men and women regarding their fertility intentions. As such, the result is aligned with the hypothesis that China-born women have lower fertility intentions than China-born men in Australia. The next step to take is to investigate whether there is also a gender difference between those cultural differences of China-born migrants and how those cultural attitude questions influence China-born migrants' fertility intentions. Those cultural attitude questions are “Would you be willing to let your child take their mother’s surname?”; “Having children is to carry on the family’s lineage”; “There are three unfilial acts, and having no descendants is the worst”; “A woman should at least have one child”; “Having children is to have someone to take care of when you are old”.

	Men		Women		Mean Diff	Sig. Diff
	Mean	SD	Mean	SD		
Fertility Intention	4.022	3.707	2.982	3.408	1.04	**

Table 2: Independent sample t-test of fertility intentions between men and women
Note: *** p<0.01; ** p<0.05; * p<0.1; Mean difference = Men's mean – women's mean

Moreover, to further explore whether China-born women exhibit lower fertility intentions than men, I toom an order probit model in Stata by controlling age, educational attainment, number of children and marital status. Table 3 addresses the outcome of the ordered probit model, which outlines that compared with China-born men, China-born women have less probability of having higher fertility intentions, and the result is statistically significance. The result is also aligned with the outcome of the independent sample t-test; the future study will focus more on how demographic factors (such as age, educational attainment, and marital status) influence China-born migrants' fertility intentions and how their migrant experiences, such as the year they arrived in Australia would affect their fertility intentions.

Variables	Coef	SE	Sig.
Women (Ref=men)	-0.287	0.108	***

Table 3: Ordered probit outcomes of women (after controlling age, educational attainment, number of children and marital status.

Note: *** p<0.01; ** p<0.05; * p<0.1; Mean difference = Men's mean – women's mean

Reference List

- Adsera, A 2011, 'Where Are the Babies? Labour Market Conditions and Fertility in Europe', *European Journal of Population*, vol. 27, no. 1, pp. 1-32.
- Australian Bureau of Statistics 2021, Births, Australia, by Country of Birth, viewed 13th September 2024, <<https://www.abs.gov.au/statistics/people/population/births-australia/latest-release>>.
- Dubuc, S 2018, 'Fertility and education among British Asian women: a success story of social mobility?', *Vienna Yearbook of Population Research*, vol. 1, pp. 269–291.
- Gray, E, Reimondos, A, Lazzari, E, Breunig, R, Steinhauser, R, Zhang, J, Biddle, N & Gray, M 2022, 'IMPACTS OF POLICIES ON FERTILITY RATES'
- Harrison, J, Keenan, K, Sullivan, F & Kulu, H 2023, 'Union formation and fertility amongst immigrants from Pakistan and their descendants in the United Kingdom: A multichannel sequence analysis', *Demographic Research*, vol. 48, pp. 271–320.
- Miller, WB 2012, 'Comparing the TPB and the T-D-I-B framework', *Vienna Yearbook of Population Research*, vol. 9, pp. 19–29.
- Miller, WB & Pasta, DJ 1995, 'Behavioral Intentions: Which Ones Predict Fertility Behavior in Married Couples?1', *Journal of Applied Social Psychology*, vol. 25, no. 6, pp. 530–555.
- Nie, W & Baizan, P 2021, 'Does Emancipation Matter? Fertility of Chinese International Migrants to the United States and Nonmigrants during China's One-child Policy Period', *International Migration Review*, vol. 55, no. 4, pp. 1029–1060.
- Tang, Z 2013, 'Sex Preference for Children and Chinese Fertility in America', in Chan Kwok-bun (ed) *International Handbook of Chinese Families*, Springer Science Business Media, New York.
- Woldemicael, G & Beaujot, R 2011, 'Fertility Behavior of Immigrants in Canada: Converging Trends', *Journal of International Migration and Integration*, vol. 13, pp. 325-341.
- World Bank 2024, Fertility rate, total (births per woman) – China, viewed 13th September 2024, <<https://data.worldbank.org/indicator/SP.DYN.TFRT.IN>>.

