

Research on the Online Media's Impact on the Chinese Youths' Marriage and Fertility Intentions

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Abstract: According to the United Nations, in the 1980s low fertility rates were found only in highly developed countries. More recently, an increasing number of countries in Asia and Latin America and the Caribbean are experiencing fertility below replacement level. Based on the Theory of Planned Behavior (TPB) and media contact, this paper studies the influencing factors of fertility intention through SPSS data analysis. The research shows that there is a significant positive correlation between behavioral attitude, subjective norms and media content on fertility intention, among which behavioral attitude is the most influential predictive variable of fertility intention. However, perceived behavioral control, duration and frequency of media use had no significant effects on fertility intention. This may be because in the Internet era, people's vision and patterns have been opened, and under the impact of multiple information, they turn to think about deeper issues such as how to realize the value of life. Individual consciousness is stronger, so personal attitude has become the most critical factor. Understanding the influencing factors of fertility intention is helpful to better cope with social problems such as fewer children and old age.

Keywords: fertility intention, the theory of planned behavior, media contact

1. Introduction

The aging society is a serious socioeconomic issue that many societies face today. In some of the most typical aging societies, such as Japan, Italy and Hong Kong, welfare maintenance, health care services, and public infrastructure all face re-designing in order to better serve the growing elder groups [1]. On the other hand, due to fewer newborns and a young workforce, employment, workforce structure, domestic economic development and tax income become extremely challenging [2]. To solve these social problems, fertility intention has become the focus of social attention. The theory of planned behavior holds that human behavior is the result of thoughtful planning, especially for life events like procreation. Fertility intention can be used as a basis for predicting fertility rate. From the perspective of planning behavior theory, fertility intention is related to fertility attitude, subjective norm and behavioral perception control. Ajzen and Klobas applied the TPB framework to their research on the fertility intention of couples from multiple nations, and found that it was different in different regions. This study is a supplement to China's

regional fertility intention under the theory of planned behavior. At the same time, in the Internet age, media contact has an important impact on people's perceptions. What kind of relationship information do people pay attention to, and does it have a positive or negative impact on people's fertility intentions? It is found that there is no previous research on China's fertility intention from the perspective of media contact. According to the results of this study, fertility attitude and subjective norm and media content have significant positive influence on fertility intention, which may help media to better set the agenda and influence social concepts, so as to solve social problems. In general, this study supplements the fertility intention of Chinese people of marriageable age under the theory of planned behavior, and explores the influence of media on fertility intention from the perspective of media exposure.

2. Literature Review

2.1. The Historical Context of Marriage and Fertility Intentions

China, which conducted a strict one-child policy in the latter half of the 20th century due to the unique circumstances of that period, is fast forwarding toward an aging society. After the government abolished the one-child policy in 2015 and began to promote the three-children outlook in 2021, the national fertility rate continued to drop with no sign of any let-up (figure 1). Corresponding to the decreasing fertility rate is the decreasing marriage rate in China (figure 2). Considering that China's current fertility rate of 1.3 (2020) is well below the replacement rate of 2.1, much pressure will be put on sustainable socioeconomic advancement, government functioning and people's standard of living [3]. These phenomena call for an urgent examination of the possible factors influencing people's marriage and fertility intentions to plan for future policymaking to solve the low fertility rate.

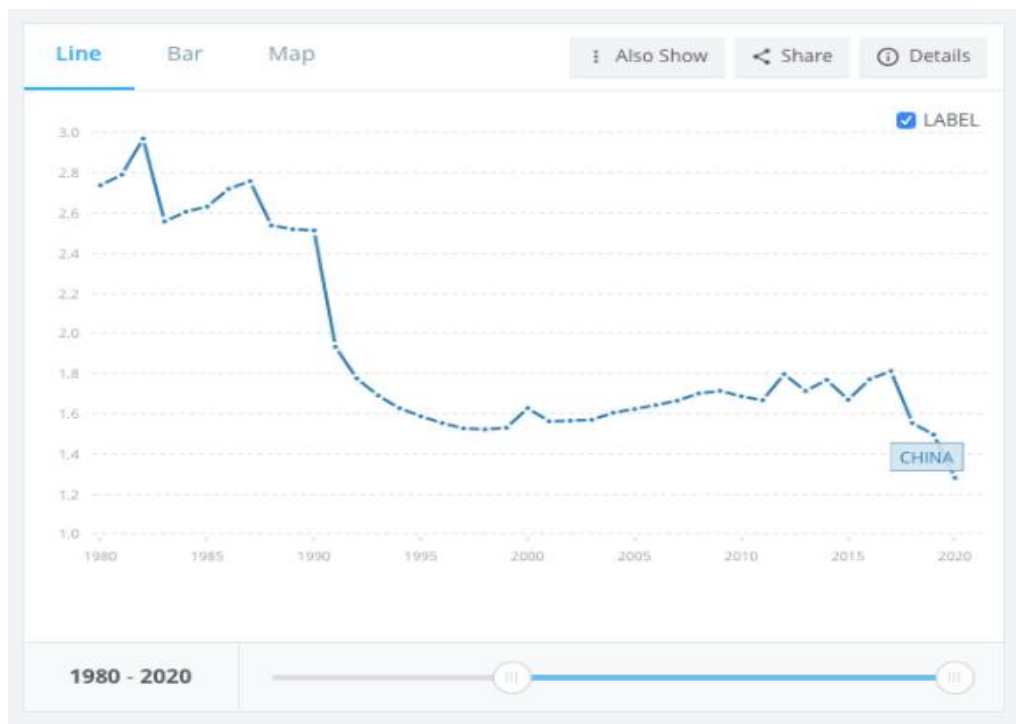


Figure 1: Fertility rate, China, 1980-2020 [4].



Figure 2: Marriage rate, China, 2000-2021, per 1,000 population [5].

2.2. Theoretical Framework and Literature Related

The Theory of Planned Behaviour (TPB) concerns predicting the behaviour of an individual according to his/her beliefs [6]. Scholars have specified the factors influencing an individual's behaviour in three categories, including 1) social attitude, 2) subjective norms, and 3) perceived behavior control [6]. Though one's attitude and perceived control toward action is subjectively determined, they are also relevant measurements that are impacted by the social environment. Moreover, the subjective norms, which are the mainstream view or social expectation regarding an individual's behavior, often present as social pressures on people [7].

Ajzen and Klobas applied the TPB framework to their research on the fertility intention of couples from multiple nations and examined people's attitudes, subjective norms and perceived control over having children [8]. They have found that how these factors influence the decision to have a child is determined on both social (macro) and personal/family (micro) levels. For instance, in Eastern European countries, subjective norms that view having (more) children positively are one of the strongest motivations for couples to have children [8]. But in Western Europe, women's individual attitude influences them more, such as that the less income they have, the less likely they would want to have children [8].

Dommermuth et al. researched how perceived control could influence having children. They have found that within a group of couples having similar demographic traits, the stronger their perceived behavioural control, the more likely they are to have a child soon [9]. This result implies that feelings of uncertainty would discourage couples from having children, supporting Ajzen and Kloba's finding that low income discourages people from having children [8]. Dommermuth et al.'s model of fertility intention under the TPB framework is presented in figure 3 [9].

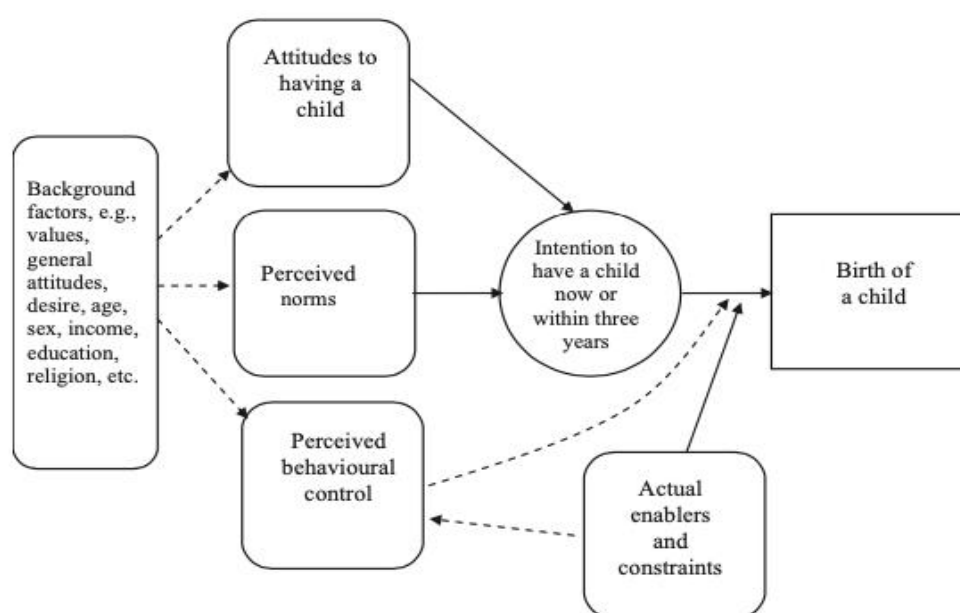


Figure 3: Approaching fertility intention from the Theory of Planned Behavior [9].

2.3. The Uniqueness of the Research and Its Purpose

After limiting the time range of research to the past six years (2016-2022), considering that the one-child policy was only lifted in 2015, there have only been a few studies that approached the fertility intention issue from the angle of agenda setting. In terms of attitude and low fertility/marriage rate, these studies find that many people are influenced by: 1) the one-child mindset, 2) the tendency to invest more time in themselves instead of raising children, 3) the fear of the negative outcome of bearing children [10-12]. Furthermore, considering the level of perceived control, young couples hesitate to have children due to 1) the time and financial constraints, 2) economic uncertainties, 3) increased divorce rates and infidelity rates [10,12,13]. Thirdly, the subjective norms of Chinese society, such as seeing childbearing as the mother's duty and the subsequent hiring discrimination against women of childbearing age, especially turn Chinese women away from wanting to have children or even get married [10,14].

It is found that research analyzing China's fertility and marriage intention issues from the agenda-setting and TPB perspectives is currently non-existent [15]. Moreover, considering that the two-child policy only became legitimized in 2015, and the three-child outlook only became promoted in 2021, research that could look into young Chinese's perception of marriage and having children is urgently needed for three reasons. Firstly, after seven years of abolishing the one-child policy, the public is allowed enough time to turn their attitude and subjective norms around. Secondly, after one year of promoting the three-child outlook, the public should be quite aware of the government's changing attitude. Thirdly, as of February 2023, China has just opened up again since January 2020 COVID-19 outbreak. These pandemic years could have considerably influenced Chinese marriage and fertility intentions, which can be investigated through this research.

Therefore, this research touches on both the theoretical gap of the combined frameworks of agenda setting and TPB and the empirical gap of the latest factors influencing young Chinese's marriage and fertility intentions after the three-child outlook and the pandemic years.

3. Method

3.1. Data Collection

This survey was conducted through the Internet and collected data on social platforms through a questionnaire survey. A total of 154 valid questionnaires were collected, mainly aged between 20 and 30. In terms of data analysis methods, this paper mainly uses SPSS for statistical analysis. First of all, SPSS was used to test the reliability of the independent variable and dependent variable (Cronbach α), then descriptive statistical analysis, and finally, regression analysis, significance and correlation tests.

3.2. Variable Setting

Based on the theory of planned behavior, this paper synthesizes previous studies and, according to the research purpose, designs variables from four aspects: behavioral attitude, subjective norms, perceived behavioral control and media use to study the impact of these factors on fertility intention.

Reliability, which reflects the consistency of answers to all questions of the same variable, is usually measured by Cronbach α . Table 1 lists seven subscales Cron-bach α coefficients. Except for the perceived behavior control and "Media and frequency of Internet use", the reliability coefficients of the remaining subscale and the total volume table are above 0.75, and the total volume table of the reliability coefficient is 0.812. Owing to the reliability of perceptual behavior control is 0.505, lower than 0.6, which does not meet the requirements, this variable is deleted. Therefore, it can be concluded that the scale used in this study has good reliability.

Table 1: Reliability analysis.

Variable	Item	Reliability (Kronbach coefficient)
Behavior attitude	A11 I think it is advantageous to give birth A12 I think it is right to give birth	0.862
Group norm	A21 My family/friends/neighbours/colleagues give me the thumbs up for having children. A22 Giving birth earns respect from family/friends/neighbors/colleagues A23 Having children will gain respect in society. A24 Government, work units, media call for response to the birth policy.	0.815
Motivation	A25 To what extent do you think family/friends/neighbors/co-workers think it's right to give birth A26 To what extent do you think family members/friends/neighbors/co-workers have fertility intentions A27 To what extent do you think the government, the workplace and the media call for giving birth	0.764
Perceptual behavioral control	A31 When I want to give birth, I have the ability. A32 When I want to give birth, I had the resources I needed to do so	0.505

Table 1: (continued).

Media and frequency of Internet use	A41 Social media (Weibo, wechat, Zhihu, Douban, etc.) A42 News website or news client (People's Daily Online, Toutiao, etc.) A43 Online forums (Tianya, etc.) A44 Search engine (Baidu Sogou, etc.)	0.626
Media content	A51 National policies and measures related to childbirth A52 Popular science related to female pregnancy, childbirth and child-rearing A53 News stories about women being treated unfairly (e.g. employment discrimination) A54 Discussion of family ethics topics (such as the relationship between mother-in-law and daughter-in-law) A55 Movies and TV dramas about marriage and family	0.790
Fertility intention	A61 In the next three years, you have the possibility of fertility A62 In the next three years, your intention to give birth	0.946

3.3. Hypothesis Setting

3.3.1. The Theory of Planned Behavior

According to the theory of planned behavior, the more positive the attitude, the greater the support of significant others, and the stronger the perceived behavioral control, the greater the behavioral intention, and vice versa. According to the predecessor scale [16], the "subjective norm" is divided into two common factors, named as "group norm" and "compliance motivation", in which "group norm" refers to an individual's subjective judgment on whether the important people around support procreation. "Compliance motive" is an individual's desire to obey the important people around him. Based on this, the research proposes the following hypothesis:

H1: Fertility attitude has a significant effect on fertility intention

H2: Subjective norms have a significant effect on fertility intention

H2a: Group norms have a significant effect on fertility intention

H2b: Compliance motivation has a significant effect on fertility intention

3.3.2. Media Contact

Table 2: Media contact.

1	Scale reference value
Attention to celebrity pregnancy-related reports	Never pay attention=1 Occasionally pay attention=2 Often pay attention=3 Very much pay attention=4
Attention to the national fertility policy	
Attention to female pregnancy, childbirth, parenting-related science content	
Attention to love and marriage, family-themed movies, and TV series	
Attention to the parenting status of relatives and friends	

According to the previous scale [17], in media contact, media content is divided into "attention to celebrity pregnancy-related reports", "attention to the national fertility policy", "attention to female pregnancy, childbirth, parenting-related science content", "attention to love and marriage, family-themed movies and TV series", "attention to the parenting status of relatives and friends" to measure the attention to parent-child information. Assign a value of 1 to "never pay attention", 2 to "occasionally pay attention", 3 to "often pay attention", and 4 to "very much pay attention", and average the scores of the five questions (Table 2). And put forward the following hypothesis:

H3: Internet media contact has a significant impact on fertility intention

H3a: The frequency of network media platform use has a significant impact on fertility intention

H3b: The content type of Internet media use has a significant impact on fertility intention

4. Result

According to the reliability coefficient, this paper puts forward two variables, "perceived behavioral control" and "online media use and frequency", to explore the influence of "behavioral attitude", "subjective norm" and "media content" on fertility intention. Correlation analysis (Table 3) and linear regression analysis (Table 4) were conducted by SPSS.

Table 3: Correlation analysis.

	Pearson correlation	Sig.(2-tailed)	N
Behavior attitude	0.508**	.000	154
Group norm	0.461**	.000	154
Motivation	0.423**	.000	154
Media and frequency of Internet use	0.277**	.001	154
Media content	0.403**	.000	154

According to the correlation analysis, the following conclusions can be drawn: 1) There is a significant correlation between behavioral attitude and fertility intention. 2) There is a significant correlation between subjective norms and fertility intention. 3) There is a significant correlation between the frequency of media and Internet use and fertility intention. 4) There is a significant correlation between media content and fertility intention.

Table 4: Linear regression analysis.

	Unstandardized Coefficients		standardized Coefficients		
	B	Std.Error	Beta	t	P
Behavior attitude	.549	0.75	0.507	.7.299	.000
Group norm	.254	.118	.196	.2.151	.033
Motivation	.316	.119	.217	2.647	.009
The frequency of media and Internet use	.470	.141	.261	3.329	.001
Media content	.382	.122	.247	3.143	.002

In linear regression analysis, if the P value is less than 0.05, there is a significant linear correlation. As can be seen from the above table:

- 1) There is a significant positive linear correlation between behavioral attitude and fertility intention. Hypothesis 1 is true.
- 2) There is a significant positive linear correlation between subjective norms and fertility intention. Hypothesis 2a and Hypothesis 2b are true.
- 3) There is a significant positive linear correlation between the frequency of media and Internet use and fertility intention. Hypothesis 3a is true.
- 4) There is a significant positive linear correlation between media content and fertility intention. Hypothesis 3b is true.

5. Discussion

This is the result of economic, social, and cultural factors. Social attitudes obviously influence the current low fertility intention. In China's family-centered traditional society, Confucian culture has a strong influence, and having a large number of offspring is often considered a symbol of good fortune. The traditional social system is "the integration of the family and the country", so bearing not only family responsibilities, but also social responsibilities, giving birth to children has been regarded as one of the most important tasks in people's lives by the mainstream concept.

However, economic development could change traditional cultural concepts. Since the reforming and opening up, Chinese society has undergone great changes, and traditional ideas have also changed. Under the modern concept, individual values, rights, and interests have been paid more attention, and individual choice and freedom are greater. People are more likely to choose their own lifestyle than to have children to maintain a family. Childbearing becomes a complex issue for young people, not just a social responsibility.

Choosing not to have children is a personal choice, but it can lead to the judgment of others. Adults who choose not to have children often face social pressure from people within their social circle. In the traditional generation of thought, fertility is one of the central values of human beings. Giving birth to children is regarded as the responsibility and obligation of family and society.

Nevertheless, in the social culture of more and more regions, some young people are more focused on personal development and self-actualization. The fast pace and high-pressure environment of modern society also make young people increasingly anxious and depressed, and they pay more attention to their mental health and happiness. In this case, the stress and responsibility that comes with having and raising a child may make them feel insecure and fearful and thus reluctant to procreate. Individual physical condition, family economic basis, job and career development, social policy support and other issues will also become a consideration before giving birth. They will make a rational choice of reproductive behavior based on the consideration of personal interests, long-term development and other factors.

The such situation reflects the past experience and expected obstacles of individuals of marriageable age. Therefore, when individuals think they have more reproductive resources and opportunities and fewer obstacles, they will have stronger perceived behavioral control over fertility. In addition, the lack of childbearing protection and the pressure on workers' families are the main reasons for the continued decline in childbearing intention. On the one hand, rising commodity prices and high housing prices make it difficult for many young people to afford to raise children. On the other hand, young people lack the ability to give birth while pursuing career development and personal wealth accumulation.

The process of analysis, evaluation and judgment of the media itself and a series of sensory information provided by the media to explain the external objects and events, so as to form human cognition of the world. The Internet is very different from traditional media in terms of information function. On the one hand, it is an open and relatively weak constraint. Individuals are no longer pure recipients of information, or anonymous publishers of information, and often have strong

personal emotions, which may ferment into network public opinions widely concerned by society. On the other hand, opinions and information on the Internet often spread quickly and widely, exerting a subtle influence on those who use the Internet. These characteristics make negative energy increasingly influential on the Internet. For example, in the fertility issue, the awareness of the cost and burden of fertility is strengthened, which will negatively impact individual fertility intention.

Surfing the Internet itself is not enough to directly affect netizens' fertility concepts and behavior. Because of the diversity of information on the Internet, there is no shortage of information that is not friendly to fertility and does not encourage fertility. For example, the phenomena of non-marriage, leftover men and women, single population and economy, dink families, rising divorce rate, inadequate education, and high cost of raising children all seem to point to the trend of low fertility.

All in all, the overall mainstream consciousness of the society for fertility is developing towards the direction of openness and freedom, and the pressure exerted by the surrounding environment of marriageable age is also increasing, which weakens the subjective reproductive intention of marriageable age. At the same time, the reproduction pressure from the living environment makes the original fertility intention of the age-appropriate people prohibitive. Media perception in the network environment spreads and amplifies negative information, which is also a booster of childbearing refusal. The above environmental factors should be actively reshaped, so that the whole society can form a fertility friendly society as soon as possible, so that the fertility rate is at a normal and healthy level.

6. Conclusion

Based on the theory of planned behavior and network perception, this paper establishes a model to analyze the factors that affect fertility intention. At present, the traditional social attitude towards childbearing is gradually weakening, the environmental pressure of subjective norms is gradually decreasing, the actual objective pressure of childbearing activities is increasing, and the negative information about the risk of childbearing is spreading increasingly on the network media. All these have an inhibiting effect on the current childbearing intention. The study of this paper can provide a preliminary reference for further research on fertility intention and provide a general direction for how to improve the national fertility rate.

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