

A study on the mechanism of influence of emotional orientation in short-form video content on fertility intentions among young women

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Abstract. Short-form video platforms like Douyin, Kuaishou, and Xiaohongshu have become important platforms for young people today to get information and shape their values. With low birth rates in society, it is worth studying how the content on these platforms affects women's willingness to have children. This influence is not simple or one-way. It is a complex process involving their thoughts and feelings, shaped in different ways. Therefore, this study uses a questionnaire survey to investigate the mechanism of this influence among women aged 20 to 30 who are active users of short-form video platforms. The results indicate that content related to childbirth risks and economic pressure shows a more significant association with fertility intentions. Consequently, this paper proposes recommendations for short-form video platforms, including optimizing recommendation algorithms and standardizing content moderation. This study provides a basis for understanding the correlation between new media content and fertility decision-making and offers empirical data to support future research and development.

Keywords: short-form video content, emotional orientation, fertility intention

1. Introduction

In recent years, low fertility rates worldwide have drawn extensive attention. Currently, over half of the world's countries and regions have fertility rates below the replacement level required to maintain a stable population. According to the latest 2024 data, China's fertility rate has fallen to around 1.0, making fertility-related issues a prominent challenge for the country. Although the actual fertility level of the childbearing-age population is higher than their fertility intention, fertility intentions themselves have long been below the replacement level. Phenomena such as delayed marriage, delayed childbearing, fewer children, and even non-marriage and non-childbearing are becoming increasingly common. This indicates a shift in the subjective perceptions and attitudes of the childbearing-age population toward reproduction and life, which intertwines with objective constraints, driving down both fertility intention and actual fertility levels.

Against the backdrop of digital media being deeply entrenched in daily life, the perceptions and decision-making processes regarding childbirth among women of childbearing age are increasingly taking on mediatized characteristics [1]. Existing research suggests that interpersonal communication of fertility-related

information has a stronger impact on the fertility perceptions and intentions of childbearing-age women than mass communication [2]. Some scholars argue that online social culture reshapes the discourse on fertility through algorithmic recommendations and emotional resonance. However, existing research still lacks specific exploration of the categorization of hard factors in multi-platform content, as well as in-depth analysis of how different dimensions interact and ultimately influence decision-making.

Therefore, this study adopts a questionnaire survey to thoroughly investigate the multifaceted impact of short-form video content on fertility intentions. It aims to provide empirical evidence and reference for understanding the current state of women's fertility intentions and for future related research.

2. Literature review

2.1. Factors influencing fertility intention

Fertility intention typically refers to women of childbearing age's subjective willingness and attitude toward having children. It serves as a core psychological variable influencing reproductive decision-making and is considered the most direct and reliable precursor of actual fertility behavior [3]. Fertility intention is shaped by a combination of multilevel factors. According to relevant research, economic factors are regarded as key external constraints. Frank Knight, the founder of the Chicago School, defined "uncertainty" as an immeasurable risk, treating it as an endogenous issue within economic systems and emphasizing its roots in imperfect knowledge. For contemporary young people, such growing uncertainties permeate their lives, intensifying material pressures and psychological insecurity, thereby leading them to adjust or even abandon their fertility plans [4].

At the individual psychological level, according to Maslow's hierarchy of needs theory, once lower-level needs are satisfied, individuals strive to fulfill higher-level needs. Individuals with higher subjective well-being have their lower-level needs more adequately met, which encourages progression toward higher-level needs. This pursuit often involves greater needs for self-actualization, and having children can be one way to fulfill them. Consequently, individuals with higher well-being may exhibit stronger fertility intentions [5].

2.2. The role of new media communication in fertility cognition

As new media develops, algorithms use users' behavioral data to create detailed profiles and deliver content that matches their interests, confining users within a relatively enclosed information space [6]. In fertility information dissemination, peer experience sharing on social media now surpasses traditional mass media in shaping the risk perceptions and behavioral intentions of women of childbearing age. Short-form videos, as digital audiovisual media, play a crucial role in disseminating fertility-related content. However, algorithmic recommendations foster personalized delivery that can lead users into a homogeneous "information cocoon"—a state in which one's information exposure is limited by personalized filters, potentially reinforcing existing biases. over time.

3. Methodology

3.1. Theoretical foundation

American social psychologist George Herbert Mead posited that the scientific world represents a shared experience articulated through symbolic systems. The mind, he argued, emerges from the social process—specifically through language within the empirical matrix of social interaction. Scholars further note that peer-

shared audiovisual content about fertility on short-form video platforms constitutes a complex symbolic system. For young female users, watching, commenting on, and sharing such videos represents an ongoing process of symbolic interaction. Their interpretation of these symbols reconstructs their fertility intentions and shapes their expectations regarding childbirth, thereby providing theoretical grounding for exploring the influence of internet content on women's reproductive decisions.

3.2. Study subjects and sampling

This study employed a questionnaire survey, distributing the questionnaires to the target population through social media platforms. The survey respondents were women aged 20 to 30 who were active users of short-form video platforms (with daily usage exceeding 6 hours). A total of 60 questionnaires were collected, and after excluding invalid responses, 57 valid samples were obtained.

3.3. Research methods

The questionnaire was designed using a single-measurement Likert five-point scale (1 = very unwilling, 5 = very willing). It consists of four core sections: respondents' age and current fertility intention status. Based on relevant theories, the study identifies nine common, neutral fertility-related symbolic themes prevalent on short-form video platforms. Specifically, these themes include: presenting fertility risks; career advancement; childcare economics; benefits of non-marriage and non-childbearing; marital and family conflicts; fertility-friendly policies, joys of parenting; scientific parenting; and the value of fertility. In a multiple-choice format, respondents were asked which themes influenced their thoughts on fertility and which factors were dominant.

3.4. Reliability and validity testing of the questionnaire

Based on a two-week observation of high-traffic videos (with likes exceeding 200,000) published on mainstream platforms (Douyin, Kuaishou), two experts were invited to review and revise the questionnaire, incorporating feedback from the target audience, to ensure its coverage was representative. This approach helps guarantee that the listed themes comprehensively reflect the core discourses and symbolic representations of fertility in short-form videos. This approach is designed to explore the influence of internet content on women's reproductive decisions.

4. Results

4.1. Overall distribution of fertility intention

The measurement results of fertility intention (as shown in Table 1) indicate that the sample group exhibits a highly concentrated negative distribution overall. Only 1.67% of the respondents explicitly indicated a willingness to have children (including "willing" and "very willing"), suggesting that among highly active female short-form video users aged 20–30, the proportion with clear fertility intentions is extremely low. In contrast, respondents who expressed explicitly negative attitudes ("very unwilling" and "unwilling") accounted for 71.67%. 26.27% of respondents held a neutral "not currently considering" stance. The data demonstrate that, within the sample of this study, young women's overall fertility intention remains low.

Table 1. Proportion distribution of respondents' willingness to have children

Fertility Intention Options	Proportion
Very Willing	0%
Willing	1.67%
Neutral / Not Currently Considering	26.27%
Unwilling	20%
Very Unwilling	51.67%

4.2. Impact validity of short-form video content themes

As shown in Table 2, a significant imbalance in the types of themes presented. Comparing the proportions of each theme, the most prevalent themes are fertility risks (76.67%), marital and family conflicts (68.33%), and economic pressure of parenting (61.67%). Moreover, More than 90% of respondents exposed to these themes perceive a negative impact. In contrast, positive themes such as the joys of parenting (20%), scientific parenting (15%), and fertility-friendly policies (20%) are less frequently presented, suggesting a relatively limited reach in dissemination.

It can also be observed that negative themes are frequently interconnected. A majority of respondents who selected "fertility risks" also identified the "economic burden of parenting", indicating that these concerns may reinforce one another. The data also demonstrate that frequent exposure to negative themes is associated with a decreased desire for children among young women.

Table 2. Distribution of short-form video thematic impacts on young women's fertility intentions ($N = 57$)

Themes of Short Video Content	Proportion
Fertility Risks	76.67%
Marital and Family Conflicts	68.33%
Career Advancement	36.67%
Childcare Economics	61.67%
Benefits of Being Single and Childfree	56.67%
Fertility-friendly Policies	20%
Scientific Parenting	15%
Value of Childbearing	16.67%
Joys of Parenting	20%

5. Discussion

5.1. Empirical findings

The survey of female users aged 20-30 who are active on short-form video platforms reveals an association between their fertility intentions and exposure to media content. The sample group reports generally low fertility intentions, and the influence of short-form videos on these intentions shows a significant structural imbalance. Economic pressures, marital issues, and parenting stress dominate as the primary factors that influence. Furthermore, negative thematic content often reinforces and interacts with similar narratives. These

findings suggest that the current communication ecology surrounding fertility issues on short-form video platforms may be systematically influencing young women's low fertility intentions by amplifying narratives of risks and pressures.

5.2. Symbolic interactionism and the construction of information cocoons

The findings of this study confirm that young women, particularly those aged 20–30, exhibit low fertility intentions themselves, while their overall assessment of media influence remains relatively balanced. This deeply resonates with symbolic interactionism and the "information cocoon" theory. Firstly, the study reveals that the same symbol (e.g., "fertility risks") can have varying directional effects (reinforcing or weakening) on individuals' fertility intentions. This precisely validates the core premise of symbolic interactionism: meaning is not inherent to symbols but is actively interpreted and assigned by actors through social interaction [7]. For individuals who already have no intention of having children, such risk-related information may be interpreted as validation of their decision; for those still hesitant, it may be perceived as a threat to be avoided.

With the continuous development and refinement of internet platforms, individuals can express their thoughts through short-form videos within legal boundaries, and open comment sections facilitate public discussion. Algorithmic recommendations strengthen the personalization of information dissemination, increasing the likelihood that audiences encounter content aligned with their own views and thus creating an "information cocoon" effect. Furthermore, platform features such as groups and forums enable users who hold similar views on topics like marriage and childbearing to form online communities more easily. These communities facilitate in-depth discussion and mutual support, which, in turn, promote a strong sense of collective identity among members [7]. The originally diverse interpretations based on individual experiences may be continuously repeated and reinforced within these closed information loops, ultimately shaping a homogeneous symbolic environment that validates pre-existing beliefs. This accelerates the solidification of specific meaning-construction patterns within distinct group communities.

5.3. Fertility intention in the complex context of new media communication

Understanding the fertility intentions of contemporary youth requires examining them within the composite context of socio-economic structures and the digital media environment. On the one hand, current marital issues, comprising spousal relationships, intergenerational conflicts, and economic pressures, constitute the realistic context for fertility decision-making. The investment logic of prioritizing "quality over quantity" in children has shifted fertility from being viewed merely as a natural life course to being increasingly integrated into the framework of overall family resource allocation and life planning, evolving into a long-term strategy based on cost-benefit assessments [8]. Simultaneously, for women, childbirth as a major life event can present risks, such as career marginalization, slowed promotion, and income decline. As a result, they are particularly cautious about the timing of childbearing [9].

Short-form video platforms, through algorithmic recommendation mechanisms, may further amplify the dissemination of non-traditional concepts such as singlehood, non-marriage, and childlessness, thereby weakening the authority and normative influence of traditional values [7]. The "information cocoon" effect, intertwined with personal life experiences, creates a symbolic environment that reinforces anxieties. This mediatized information ecology resonates with socio-economic pressures, shaping how individuals perceive and decide about fertility [10].

5.4. Practical implications

Short-form video media plays a significant role in the public discourse on fertility-related issues. Therefore, relevant media platforms should take on greater responsibility to foster a more comprehensive and diverse space for discussion. In algorithmic recommendations and traffic distribution, platforms could consider evaluating content diversity, optimizing content moderation, and providing users with a more balanced information environment.

The research also indicates that rational, supportive information, such as fertility-friendly policies, has not effectively reached a broad audience. This highlights the need to improve communication strategies. In the future, it is essential to explore innovative dissemination, such as animations, situational dramas, and other engaging formats, to popularize parenting knowledge. For example, animated demonstrations of prenatal check-ups or expert-led Q&A sessions can raise the credibility and professionalism of the content. Fostering a constructive online discussion environment is also important. This study suggests that emotional and confrontational remarks may reinforce negative perceptions. Therefore, content management mechanisms should focus on standardizing moderation, promoting respectful discourse, and reducing emotionally charged venting. These steps can help create an online atmosphere more conducive to informed decision-making.

6. Conclusion

This study systematically investigates the influence of emotional orientation in short-form video content on the fertility intentions of young women through a questionnaire survey. The research finds that thematic content related to fertility risks, marital and family conflicts, and the economic pressures of parenting dominates in both reach and perceived impact. In contrast, positive thematic content such as the joys of parenting and fertility-friendly policies, has a relatively limited scope of influence. The study suggests that the mediatized environment constructed by short-form video platforms may influence young women's fertility intentions. Accordingly, the study further proposes optimizing algorithmic mechanisms, innovating public messaging formats, and incorporating expert Q&A sessions. These actions aim to foster a more positive online community environment.

This study still has certain limitations. The questionnaire is relatively small, and the observation period is brief. Future research could expand the survey scope. It could also incorporate more open-ended questions that elicit subjective input to gain deeper insights into respondents' thoughts and needs. Future studies could integrate sociology, communication studies, and other fields to comprehensive intervention strategies. In-depth investigations into the mechanisms of recommendation algorithms on short-form video platforms could also be conducted.

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