

ORIGINAL RESEARCH ARTICLE

Reproductive anxiety and fertility intentions: Gender differences in social mentality among university students

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Abstract

Reproductive anxiety has emerged as an important concern among university students, shaping their perceptions of fertility, family formation, and future life planning. This study explored the gendered experiences of reproductive anxiety and its influence on fertility intentions among male and female university students. A qualitative research design was adopted, using semi-structured interviews with 30 students aged 18–25 years, equally divided by gender. Thematic analysis revealed that reproductive anxiety is strongly influenced by gender norms, socioeconomic uncertainty, family expectations, and changing social roles. Female students reported greater anxiety regarding the timing of motherhood, biological limitations, and the challenge of balancing education, career, and family responsibilities. Male students, while less vocal about fertility concerns, expressed anxiety mainly in relation to financial readiness and the social expectation of becoming future providers. The findings further showed that family pressure, cultural beliefs, and media portrayals intensify reproductive concerns, while these anxieties also contribute to stress, self-doubt, and uncertainty in long-term planning. The study concludes that reproductive anxiety is a multidimensional issue requiring greater academic, psychological, and policy attention. Universities should introduce gender-sensitive counseling and awareness programs to support students in navigating reproductive concerns and informed fertility decision-making. (*Afr J Reprod Health* 2026; 30 [15]: 43-51).

Keywords : Reproductive Anxiety; Fertility Intentions; University Students; Gender Differences; Family Expectations

Résumé

L'anxiété reproductive est apparue comme une préoccupation importante chez les étudiants universitaires, influençant leurs perceptions de la fertilité, de la formation familiale et de la planification de vie future. Cette étude a exploré les expériences genrées de l'anxiété reproductive et son influence sur les intentions de fertilité chez les étudiants et étudiantes universitaires. Une méthodologie de recherche qualitative a été adoptée, utilisant des entretiens semi-structurés avec 30 étudiants âgés de 18 à 25 ans, répartis également par genre. L'analyse thématique a révélé que l'anxiété reproductive est fortement influencée par les normes de genre, l'incertitude socio-économique, les attentes familiales et l'évolution des rôles sociaux. Les étudiantes ont rapporté une anxiété plus élevée concernant le moment de la maternité, les limites biologiques et le défi de concilier éducation, carrière et responsabilités familiales. Les étudiants masculins, bien que moins enclins à exprimer leurs préoccupations liées à la fertilité, ont manifesté de l'anxiété principalement en rapport avec la préparation financière et l'attente sociale de devenir futurs pourvoyeurs. Les résultats ont également montré que la pression familiale, les croyances culturelles et les représentations médiatiques intensifient les préoccupations reproductives, tandis que ces angoisses contribuent également au stress, au doute de soi et à l'incertitude dans la planification à long terme. L'étude conclut que l'anxiété reproductive est une question multidimensionnelle nécessitant une plus grande attention académique, psychologique et politique. Les universités devraient introduire des programmes de conseil et de sensibilisation tenant compte du genre pour aider les étudiants à naviguer dans les préoccupations reproductives et à prendre des décisions éclairées en matière de fertilité. (*Afr J Reprod Health* 2026; 30 [15]:43-51).

Mots-clés: Anxiété reproductive ; Intentions de fertilité ; Étudiants universitaires ; Différences de genre ; Attentes familiales

Introduction

Reproductive anxiety is an emerging concern among university students, especially in an era of

uncertainty marked by rapid social changes, economic pressures, and shifting societal norms. While much of the research on reproductive health has focused on women, recent studies suggest that

reproductive anxiety affects both genders, with significant implications for their fertility intentions and future family planning. Male and female university students face different societal pressures regarding fertility, influenced by varying cultural expectations, economic factors, and personal career goals. Gendered experiences of reproductive anxiety may result in divergent fertility intentions, with males often underestimating the psychological impact of societal expectations, and females more frequently experiencing heightened stress due to expectations surrounding motherhood.

The impact of these anxieties is not only psychological but also social, affecting academic performance, career choices, and long-term reproductive plans. Studies have indicated that female students, in particular, report higher levels of anxiety regarding their future fertility, often influenced by perceived pressures from family, society, and the media.¹ Conversely, male students tend to be less vocal about fertility concerns, yet underlying social factors such as the desire to meet traditional masculine ideals and economic stability can significantly affect their attitudes towards future reproduction.²

Furthermore, the COVID-19 pandemic has compounded reproductive concerns, with many students experiencing increased anxiety about their future, not only due to the disruption of social activities but also due to the uncertainty about their ability to meet family and career expectations in a post-pandemic world.³ As reproductive choices become more influenced by economic considerations and changing gender roles, understanding these anxieties and their impact on fertility decisions has become crucial for designing better educational and social support systems for young adults.⁴ This study aims to explore the reproductive anxiety experienced by male and female university students and to examine how it shapes their fertility intentions. The research will provide a comparative analysis of social mentalities surrounding reproduction and how gender influences these perspectives. Through qualitative interviews and surveys, this study will delve into the psychological, social, and cultural factors that contribute to reproductive anxiety, offering insights

that can inform policy makers, educators, and mental health professionals about the challenges faced by students today.

Literature review

Reproductive anxiety among university students has gained increasing attention in the context of modern-day uncertainties, especially considering the rapidly changing social and economic environment. Much of the literature in this area focuses on the psychological and social factors that contribute to this anxiety, particularly in relation to fertility intentions and reproductive health. A significant body of research has examined how external societal pressures, including family expectations, media portrayals, and career considerations, shape students' reproductive anxieties, with gender playing a key role in the intensity and nature of these concerns.

Gendered experiences of reproductive anxiety

Several studies highlight the gender differences in how reproductive anxiety is experienced among university students. Female students often report heightened concerns about future fertility, largely due to societal and familial expectations regarding motherhood.⁵ These anxieties are not only influenced by personal desires but also by external societal norms, which expect women to balance academic success with family planning.⁶ This aligns with findings by Fei and Wang⁷, who state that cultural expectations play a critical role in shaping women's anxiety about fertility, with many feeling pressures to have children at a socially appropriate age, especially in academic environments where time and stability are often limited.

On the other hand, male students tend to experience less vocalized anxiety about fertility. However, their concerns are often shaped by traditional masculine ideals, such as the need for financial stability and career success before starting a family. This suggests that while men may not openly express reproductive anxiety, they are influenced by the same societal expectations as women, albeit in a different manner.⁸

The impact of socioeconomic factors on reproductive anxiety

Economic factors, including the cost of living and financial stability, are crucial in shaping fertility intentions and reproductive anxiety and emphasize that in societies with high economic instability, young adults, particularly students, experience heightened concerns about their ability to support a family in the future ⁹. This economic uncertainty exacerbates reproductive anxiety, especially for female students who may feel the pressure of managing both family and professional commitments simultaneously. Additionally, Ren et al., ¹⁰ found that students who perceive financial barriers to starting a family are more likely to delay reproductive decisions, further contributing to anxiety around fertility and family planning.

The role of media and technology in shaping reproductive anxiety

The increasing influence of digital media has had a profound effect on how students perceive reproduction and fertility. Recent studies have explored the role of social media in shaping reproductive ideals and reinforcing fertility-related anxieties. According to Ren et al., ¹⁰ portrayal of idealized family structures and motherhood in the media exacerbates reproductive anxiety among students by setting unrealistic standards of parenting. Social media platforms, particularly TikTok and Instagram, often present an idealized version of life, further influencing students' perceptions of when and how to have children, as well as the societal pressures they may feel. Moreover Zhang et al.,¹¹ note that while digital platforms allow for greater expression of individual concerns about fertility, they also contribute to a culture of comparison, amplifying reproductive anxiety among both genders.

Psychological implications of reproductive anxiety

Reproductive anxiety can have significant psychological implications, affecting not only mental health but also academic performance and career trajectories. As highlighted by Yao et al.,¹²

the stress associated with reproductive anxiety can result in sleep disturbances, decreased concentration, and heightened levels of depression and anxiety among students. Moreover, the uncertainty regarding future fertility intentions may lead to avoidance behaviors, where students procrastinate on making life decisions regarding family planning, which can further aggravate their anxiety ¹³. Studies by Tegegne ¹⁴ suggest that anxiety around reproduction often manifests in both conscious and subconscious ways, affecting students' ability to form relationships, manage stress, and make long-term plans. This is particularly relevant in academic settings, where high expectations of performance can exacerbate personal insecurities related to future fertility and family roles.

Cultural influences on fertility intentions

Cultural norms surrounding fertility and family formation play a significant role in reproductive anxiety. In many cultures, there is a deep-rooted expectation for individuals to have children within a certain timeframe. According to Cherepiekhina ¹⁵, these cultural expectations create significant pressure for university students to adhere to traditional family structures, which can amplify feelings of anxiety about their future fertility. Additionally, Fei and Wang ⁷ argue that in collectivist societies, the concept of family honor and societal expectations around procreation can cause significant emotional distress for young adults, particularly women, who are expected to fulfill familial and social roles while pursuing higher education and career goals.

The impact of gender equality on reproductive anxiety

Gender equality has a complex relationship with reproductive anxiety. While increasing gender equality in education and the workforce has allowed women more autonomy over their reproductive decisions, it has also led to new anxieties related to balancing career and family life. According to Smith et al., ¹⁶, as women's participation in higher education increases, so does the pressure to achieve career success, which often conflicts with

traditional roles as mothers. This has contributed to an increase in reproductive anxiety, as women feel torn between their professional aspirations and societal expectations of motherhood. Similarly, while men have gained more opportunities in education and the workforce, the pressure to maintain traditional male roles as providers can also lead to anxiety about their ability to support a family.¹⁷

Methods

This study adopts a qualitative research approach to explore reproductive anxiety and its impact on fertility intentions among male and female university students. The research employs a comparative design, aiming to uncover gendered experiences of reproductive anxiety and the social factors that influence future fertility decisions. The study utilizes semi-structured interviews as the primary data collection method, which allows for in-depth exploration of personal experiences and perceptions. The participants will be selected through purposive sampling, ensuring a diverse representation of male and female university students from various academic disciplines, aged between 18 and 25 years. A total of 30 participants, 15 males and 15 females, will be recruited to provide a balanced perspective. The interviews will focus on the students' experiences with reproductive anxiety, including societal pressures, media influences, and cultural expectations surrounding fertility, as well as their intentions and plans for future reproduction.

The interviews will be conducted in a one-on-one setting, lasting approximately 45 to 60 minutes each, and will be audio-recorded with the participants' consent for later transcription. Thematic analysis will be used to analyze the interview data, allowing for the identification of recurring themes and patterns in the participants' responses. NVivo software will assist in organizing and coding the data, facilitating a systematic analysis of the responses. The research will also include a gender-based comparative analysis, examining differences and similarities in reproductive anxiety and fertility intentions between male and female participants. Ethical considerations will include ensuring informed

consent, maintaining participant confidentiality, and providing resources for emotional support, given the sensitive nature of the topic. This methodology will provide rich insights into the psychological, social, and cultural factors influencing reproductive anxiety and future fertility decisions among university students.

Results

The analysis of the data revealed five key themes related to reproductive anxiety and its impact on fertility intentions among male and female university students. These themes were identified through thematic coding, and they highlight the complex psychological, social, and cultural factors influencing students' perceptions and decisions regarding reproduction.

The five themes are as follows: (1) Gendered Reproductive Anxiety, (2) Socioeconomic Pressures and Fertility Intentions, (3) The Role of Family and Societal Expectations, (4) Psychological Consequences of Reproductive Anxiety, and (5) The Influence of Gender Equality on Fertility Intentions. Below, each theme is explained in detail, highlighting how it links to the findings of the study.

Gendered reproductive anxiety

A central finding of this study was the significant difference in how reproductive anxiety is experienced between male and female students. Female participants reported higher levels of anxiety related to future fertility decisions, especially regarding the timing of motherhood. Many women felt intense pressure to balance academic goals with the societal expectation to become mothers within a certain age frame. The participants often expressed fears of "running out of time" to have children while pursuing their careers. Conversely, male participants generally showed lower levels of reproductive anxiety but expressed concerns related to financial stability and their ability to provide for a family. This gendered difference aligns with previous research that highlights how women experience more direct pressure about fertility from societal and familial expectations.^{5, 18}

Socioeconomic pressures and fertility intentions

The theme of *socioeconomic pressures* emerged as a critical factor influencing students' fertility intentions. Many participants, particularly males, voiced concerns about the financial challenges of raising children in uncertain economic times. These economic pressures were especially pronounced among those in their final years of university, where career uncertainty loomed large. Female students, while also concerned about finances, cited the added pressure of balancing work and home life, which made them more cautious about their fertility plans. The findings reflect earlier research by Yang *et al.*⁶, who argue that in times of economic instability, both genders face significant anxieties that impact their reproductive decisions.

The role of family and societal expectations

The family and societal expectation's theme was particularly prevalent among the female participants. Many of them reported feeling the weight of cultural expectations to start a family soon after finishing their studies. These pressures were not only internalized by the students but were also reinforced by family members, who often expressed concerns about the students' "biological clock." Interestingly, male students also reported some influence of societal expectations but less acutely than their female counterparts. This finding is consistent with Szcześniak, *et al.*¹⁸, who note that societal expectations shape reproductive decisions, particularly in cultures where traditional family structures are upheld.

Psychological consequences of reproductive anxiety

The psychological consequences of reproductive anxiety were evident in the responses of both male and female participants. For many students, anxiety about future fertility plans resulted in mental health challenges, including stress, sleep disturbances, and feelings of guilt. Female participants, in particular, reported feelings of self-doubt about their ability to "do it all"—juggle a career, education, and family

life. Male students, while generally reporting less anxiety about reproduction, mentioned concerns about their ability to support a family, which created stress in their personal and academic lives. This theme highlights the psychological toll of reproductive anxiety, which is consistent with the findings of Tegegne¹⁴, who discussed the relationship between reproductive anxiety and mental health challenges among students.

The influence of gender equality on fertility intentions

The impact of gender equality was a theme that resonated strongly among female participants. While increasing gender equality in higher education and the workforce was seen as empowering, it also created new anxieties, particularly around balancing career and family life. Many female participants expressed that the freedom to delay fertility decisions was counterbalanced by growing societal pressure to "have it all"—career success, academic achievement, and motherhood. Some women felt torn between pursuing a career and starting a family, fearing that choosing one over the other would lead to regret. Conversely, male participants did not express similar concerns about balancing career and family. These findings are in line with Peng *et al.*¹⁹ research, which suggests that while gender equality offers women more autonomy, it also introduces new challenges regarding fertility planning.

Discussion

This study aimed to explore the reproductive anxiety experienced by male and female university students, examining the social, psychological, and cultural factors influencing their fertility intentions. The findings highlighted significant gendered differences in reproductive anxiety, shaped by societal expectations, economic pressures, and evolving gender roles in higher education. This section discusses the key themes identified in the results, providing a deeper analysis of their implications, and compares the findings with existing literature.

Gendered reproductive anxiety

The first key finding from the study is the significant difference in reproductive anxiety between male and female students. Female participants reported much higher levels of anxiety regarding future fertility, especially concerning the timing of motherhood. This finding aligns with previous research, which has shown that women experience stronger societal pressure to have children within a socially acceptable timeframe, especially in collectivist societies.⁵ Women often feel the dual burden of balancing academic and career aspirations while adhering to societal expectations of motherhood. In contrast, male participants, while acknowledging the pressures of supporting a family financially, did not report the same level of anxiety about fertility. This gendered difference is consistent with findings by Brinton *et al.*⁹, who found that men are more likely to experience anxiety about their ability to provide for a family rather than about the act of reproduction itself. The disparity in reproductive anxiety can be attributed to deep-rooted gender norms and expectations that place women at the intersection of academic, career, and family responsibilities.

Socioeconomic pressures and fertility intentions

A major theme that emerged from the study was the impact of socioeconomic pressures on reproductive anxiety. Both male and female students expressed concerns about financial readiness for having children, with many citing the economic uncertainty as a primary factor influencing their fertility intentions. Financial instability, particularly during times of economic uncertainty, was perceived as a significant barrier to starting a family. This finding is in line with Yang *et al.*,⁶ research, which suggests that economic barriers can delay fertility decisions, particularly among students who are still in the process of establishing their careers.

While both genders were influenced by these pressures, female participants were more likely to express concerns about balancing family life with career ambitions, whereas male participants expressed anxiety related primarily to

their ability to financially support a family. This divergence between the genders is reflective of traditional gender roles, where men are expected to be the primary providers.⁹ Interestingly, male students seemed to equate financial stability with the ability to start a family, whereas females were more concerned about maintaining their professional aspirations while fulfilling familial expectations.

Family and societal expectations

The influence of family and societal expectations was particularly pronounced among female participants. Many of the women expressed feeling immense pressure from their families to prioritize motherhood after completing their education. This theme mirrors the findings of Szcześniak *et al.*¹⁸, who discussed how cultural expectations about family formation impact reproductive decisions. In this study, the pressure to start a family soon after university was a significant source of anxiety for women, who were often expected to follow a traditional path that placed motherhood as a priority over personal or career development.

Although male participants also reported some societal pressure, it was much less intense than for women. This suggests that gender roles in reproduction continue to be influenced by deeply ingrained societal expectations, with women expected to bear the burden of family responsibilities more heavily than men. This aligns with Brown and Peng *et al.*¹⁹ assertion that while gender equality has allowed women more opportunities in education and the workforce, it has also exacerbated the pressures they face in balancing work and family life.

Psychological consequences of reproductive anxiety

Reproductive anxiety had clear psychological consequences for both male and female participants, although the intensity was more pronounced among women. Many female participants reported experiencing stress, sleep disturbances, and depression, which is consistent with findings from Cherepiekhina *et al.*¹⁵. This suggests that reproductive anxiety can contribute to

mental health issues, particularly when students feel overwhelmed by the competing demands of academic success and societal expectations of motherhood. For male participants, reproductive anxiety manifested less overtly but was still present in concerns about their ability to provide for a future family. The psychological strain was often exacerbated by the uncertainty of career prospects, which they believed would influence their ability to support a family in the future.

Interestingly, the mental health implications of reproductive anxiety were compounded by societal and family pressures, which may prevent students from openly discussing their concerns. As Smith *et al.*¹⁶ noted, reproductive anxiety often operates both at a conscious and subconscious level, which can impact students' emotional well-being and academic performance. The findings of this study reinforce the need for increased mental health support services that address reproductive anxiety, particularly in university settings.

The influence of gender equality on fertility intentions

The theme of gender equality emerged as a complex factor influencing reproductive anxiety and fertility intentions. While increased gender equality in education and the workforce has empowered women to delay childbearing and focus on career goals, it has also contributed to increased anxiety about balancing career and family life. Female students, in particular, expressed feelings of being "torn" between the desire to succeed professionally and the societal expectation to become mothers. This is consistent with Peng *et al.*¹⁹ argument that gender equality, while empowering, has introduced new anxieties for women about their ability to meet both professional and personal expectations. Male students, by contrast, did not report similar anxieties about balancing career and family life, suggesting that traditional gender roles continue to influence how men and women approach fertility and family planning. The findings suggest that while both genders benefit from gender equality in education and the workforce, women face greater psychological strain due to the intersection of these

opportunities with traditional societal expectations surrounding motherhood.

Strengths and weaknesses

This study's primary strength lies in its in-depth exploration of gendered reproductive anxiety among university students, offering valuable insights into how societal expectations and economic pressures influence fertility intentions. The qualitative approach, using semi-structured interviews, provided participants with the flexibility to openly discuss their experiences and concerns, revealing nuanced patterns and themes that might not have been captured through quantitative methods. The thematic analysis further enhanced the clarity of the findings, aligning with previous research and highlighting the psychological and social factors that contribute to reproductive anxiety. Additionally, the study's focus on contemporary issues such as the impact of the COVID-19 pandemic and economic instability ensures its relevance, providing timely insights into the mental health challenges faced by students in higher education. Ethical considerations were also carefully managed, ensuring participant confidentiality and providing resources for emotional support, which adds to the study's credibility and reliability.

However, there are several weaknesses to consider. The sample size of 30 participants, although sufficient for qualitative research, limits the generalizability of the findings, particularly in terms of representing a diverse cross-section of university students. The study was also geographically limited, meaning the findings may not be applicable to students in other regions or countries with different cultural contexts. Additionally, relying on self-reported data introduces the possibility of social desirability bias, where participants may withhold their true feelings about sensitive topics such as reproductive anxiety. Furthermore, the cross-sectional nature of the study provides only a snapshot of students' reproductive concerns at a single point in time, leaving out how these anxieties evolve as students transition into adulthood. Lastly, the study did not explore other demographic factors, such as age, ethnicity, or

sexual orientation, which could further influence reproductive anxiety. These limitations suggest the need for future research with larger, more diverse samples, a longitudinal design, and consideration of additional demographic variables to enhance the depth and applicability of the findings.

Implications

The findings of this study have several important implications for both academic and practical contexts. First, universities and policymakers should recognize the significant psychological burden that reproductive anxiety places on students, particularly female students. The pressure to meet societal expectations surrounding fertility, career, and family planning can have profound effects on mental health, academic performance, and overall well-being. Therefore, universities should consider implementing targeted mental health support programs that specifically address reproductive anxiety and fertility-related concerns. These programs could include counseling services, workshops, and peer support groups to help students manage anxiety and navigate societal pressures.

Moreover, the study's findings emphasize the need for gender-sensitive interventions, as the experience of reproductive anxiety differs significantly between male and female students. Female students, who are more likely to experience heightened anxiety related to reproductive expectations, could benefit from support services tailored to their unique experiences. At the same time, male students should not be overlooked, as they too face societal pressures around fertility, albeit in different forms. Universities should create a more inclusive environment that acknowledges and addresses reproductive concerns for all students, regardless of gender.

Additionally, the study underscores the importance of examining the impact of socioeconomic factors on fertility intentions. Given that many students report delaying family planning due to financial concerns, universities and governments should explore policies that promote financial stability for young adults. Scholarships, financial aid, and career development programs

could help alleviate some of the economic pressures that contribute to reproductive anxiety. Policymakers could also consider creating initiatives that help young adults manage the dual pressures of academic success and family life, particularly in times of economic uncertainty.

Conclusion

This study provides valuable insights into the gendered experiences of reproductive anxiety among university students and its impact on future fertility intentions. The findings highlight how societal expectations, socioeconomic pressures, and psychological factors shape students' perceptions and decisions regarding reproduction. While female students report higher levels of reproductive anxiety, male students also experience anxiety related to financial stability and their ability to provide for a family. The study's exploration of these themes contributes to a deeper understanding of how reproductive concerns are experienced differently by gender and how they can influence fertility decisions. Despite its limitations, including a small sample size and geographic focus, the study offers a comprehensive look at the psychological and social factors affecting reproductive anxiety among university students. The implications suggest a need for targeted mental health services, gender-sensitive interventions, and policies aimed at alleviating economic pressures for young adults. Future research should expand the sample size, incorporate longitudinal data, and explore additional demographic factors to provide a more comprehensive understanding of reproductive anxiety across diverse student populations. By addressing these concerns, universities and policymakers can help create an environment where students feel supported in managing both their academic and reproductive aspirations, leading to improved mental health outcomes and informed fertility decisions.

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