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The analysis of high IQ's different effects on marriage rates for men and women

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Abstract:

Research shows that high IQ (Intelligence Quotient) is positively correlated with increasing marriage rates for men and negatively correlated with increasing marriage rates for women. This paper uses the framework of cognitive psychology and evolutionary psychology to elucidate the potential reasons for this phenomenon. In general, women value intelligence more than men when choosing a mate, so knowledgeable women face a more limited range of choices. The social culture of marriage and reproduction is more consistent with men's pursuit of marriage, which can easily lead to cognitive dissonance in women. At present, gender bias is still widespread, and this paper calls for the protection of the rights of women and other marginalised groups in the choice of marriage and the promotion of equality of opportunity and choice-making.

Keywords: Intelligence Quotient; marriage rate; cognitive psychology; evolutionary psychology; social psychology

1. Introduction

Female PhD holders, a highly intelligent population, share the dilemma that they have to omit their educational qualifications from their profiles on dating apps to potentially enhance their chances of securing successful romantic connections (Anna, 2023). During the recruitment process, companies may demonstrate bias against women who are married, although they may be more competitive or qualified. The two phenomena of gender bias appear to resonate with the topic that higher IQ (Intelligence Quotient) is positively associated with increased marriage rates for men, while an inverse relationship is observed for women. Marriage is defined as the social institution in which two (or, less frequently, more) people commit themselves to a socially sanctioned relationship in which sexual intercourse is legitimated, and there is legally recognised responsibility for any offspring as well as for each other (VandenBos, 2007). IQ is a score derived from one or more standardised tests (psychologist-administered) designed to assess one's intelligence (Hally, 2015).

In light of the intricate relationship between intelligence, gender, and marital trends, this study aims to employ the theoretical frameworks of cognitive and evolutionary psychology to further elucidate the underlying mechanisms that govern these phenomena. By integrating these psychological perspectives, the research seeks to provide a more nuanced understanding of how IQ impacts marriage

likelihood for both men and women. Furthermore, this work intends to draw attention to the rights and needs of underrepresented and marginalised populations that suffer gender bias and social stigmas and advocate for greater equality in opportunities and choice-making in alignment with the liberal principles championed by John Locke.

2. Evolutionary Psychology Perspective

Evolutionary psychology is defined as an approach to psychological inquiry that views human cognition and behaviour in a broadly Darwinian context of adaptation to evolving physical and social environments and new intellectual challenges (VandenBos, 2007). The concept of sexual selection, as outlined in Charles Darwin's theory of evolution, can explain that women might naturally value intelligence in their choice of male partners (Kuijper & Weissing, 2012). Intelligence was likely to be a vital ability in the survival of ancestors, as this trait was able to play a role in the process of hunting; thus, this trait would have stayed in the female psychological system, which would have resulted in the formation of a preference for mates with this trait (Prokosch, 2009). This may partially explain why high-IQ men have a higher marriage rate since inertia from this period may have contributed to establishing preference baselines. Moreover, this underlying mechanism is still prevalent in the contemporary society.

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A study focused on the marital preferences exhibited by women when considering a potential long-term mate; participants were asked to "buy" traits with different-sized budgets, and when budgets were constrained, participants' preferences revealed the relative importance of mate traits. When women were given lower budgets, they spent the highest percentage of their budgets on intelligence, suggesting that male intelligence is a "necessity" rather than a "luxury" in women's mate selection criteria (Li et al., 2002). Furthermore, some studies based on geometric morphometrics suggest that male intelligence is reflected in facial features and can be assessed more easily than female intelligence (Kleisner et al., 2014). This phenomenon may contribute to the increased likelihood of men with higher IQs being chosen as partners, as their intellectual capabilities are potentially more perceptible.

When it comes to women, high IQ may not be "sexy" in the traditional sense. When choosing a partner, men mainly consider physical attractiveness for short-term partners, and although intelligence is also considered for long-term partners, it is still not a significant factor (Jonason et al., 2019). Moreover, in some traditional cultural contexts, highly accomplished women may not be viewed favourably, as their level of education or intelligence is misconstrued as incompatible with traditional gender roles, such as housewifery or caregiving responsibilities (Cuddy et al., 2015). While higher IQ is generally perceived as a favourable trait, it is paradoxical that this attribute does not universally result in increased marriage rates for women. Moreover, parental investment theory, rooted in evolutionary psychology, posits that parental investment in offspring varies across species and genders due to the differential costs and reproductive strategies associated with producing and nurturing offspring (Bjorklund & Kipp, 1996). In line with the principles of parental investment theory, the comparatively lower reproductive costs for men result in different priorities when selecting partners. Consequently, men may not prioritise intelligence, a trait that could potentially enhance offspring survival, to the same extent as women; contrastingly, women's higher investment in reproduction necessitates a more selective approach to mate selection (Feingold, 1992). The mate selection priorities between men and women, as previously discussed, are further substantiated by the disparities in the costs associated with childbearing risks. Postpartum depression (PD), for example, is a mental health condition that can affect both men and women following the birth of a child (Goodman, 2004). However, a study indicates a significant disparity in prevalence rates among the genders, with women being disproportionately affected. In some countries, the occurrence of PD among women can be as high as 24.6% (Xie et al., 2007). Therefore, women's caution in choosing a partner can be argued from an evolutionary psychology perspective.

3. Cognitive Psychology Lens

Cognitive Psychology is the branch of psychology that explores the operation of mental processes related to perceiving, attending, thinking, language, and memory, mainly through inferences from behaviour (VandenBos, 2007). According to cognitive dissonance theory, people have a fundamental motivation to maintain consistency among elements in their cognitive systems (Harmon-Jones & Mills, 2019). When inconsistency occurs, people experience an unpleasant psychological state that motivates them to reduce the dissonance in a variety of ways (Mc-Grath, 2017). Highly intelligent or educated women often encounter societal pressures and cultural expectations that conflict with their aspirations and choices, particularly regarding marriage and childbearing. To relieve cognitive dissonance, these women may amplify their determination to challenge traditional norms by pursuing alternative paths, such as remaining unmarried or delaying marriage (Balestrino & Ciardi, 2008). For example, in Jane Austen's letters, Jane Austen underscores her desire to challenge societal expectations by asserting her independence and prioritising personal happiness, deciding to remain unmarried, exemplifying how cognitive dissonance influences women's marriage decisions (Austen, 2011). Unlike women, men typically do not experience cognitive dissonance as a result of societal expectations and the prevailing social climate. Instead, these factors often align with and support men's pursuits in marriage. For example, in some cultures, stereotypes of married men include being trustworthy, breadwinners, and job-competent; however, single men include womaniser, irresponsible, self-indulgent, and immature (Sakallı Uğurlu et al., 2021). This is a solid illustration of the socio-cultural challenges and influences on people's cognition of different genders.

According to cognitive development theory, the growth and maturation of thinking processes of all kinds, including perceiving, remembering, concept formation, problem-solving, imagining, and reasoning (VandenBos, 2007). People with higher IQs often have greater access to educational resources, which can significantly impact their cognitive development and overall worldview. As women with higher intelligence usually possess more excellent cognitive capabilities and heightened awareness, they tend to adopt a more deliberate and thorough approach to selecting their partners (Cannonier & Mocan, 2018). In light of the factors previously mentioned, these women frequently employ their IQ as a benchmark for identifying potential partners with even higher intelligence, thereby

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significantly reducing their pool of eligible mates (Park et al., 2016). Consequently, the likelihood of marriage may be further diminished for women with exceptionally high levels of intelligence as they navigate a more constrained range of options in pursuit of their preferred partner characteristics. Aside from the psychological mechanisms, external elements also play a significant role in perpetuating the observed discrepancies in marriage rates.

4. Social psychology perspective

Social psychology is defined as the study of how an individual's thoughts, feelings, and actions are affected by the actual, imagined, or symbolically represented presence of other people(VandenBos, 2007). Marriage is widely perceived across various cultures as a source of happiness and fulfilment, contributing to elevated levels of well-being among individuals who enter into matrimonial bonds (Stack & Eshleman, 1998). Contrary to popular belief, a study investigating the happiness levels of unmarried women revealed that their overall well-being was comparable to that of their married counterparts. This can be attributed to the strong support networks that these women cultivate through their professional endeavours, friendships, and familial bonds (Kislev, 2018). This is supported by the social support theory that human happiness is multifaceted, stemming from a variety of sources (Lakey & Cohen, 2000). Consequently, individuals exercise their autonomy in selecting the most appropriate avenues for achieving personal fulfilment, with marriage representing just one option within a broader spectrum of potential choices.

Additionally, the stigma regarding high-IQ women is prevalent. The stigma is the negative social attitude attached to a characteristic of an individual that may be regarded as a mental, physical, or social deficiency (Link & Phelan, 2001). For example, high-IQ women, as representative female PHDs, are recognised as being leftover, too educated, too old, too unattractive, too stubborn and unwanted by males (Li, 2023). Furthermore, the contingent of stigmatisation surrounding high-IQ women, particularly in the context of modern social media platforms, has far-reaching consequences. In some instances, women possessing advanced degrees, such as PhDs, are derogatorily referred to as "genderless" on social media (Zhang et al., 2024). These prejudices not only impose limitations on the self-perception and personal growth of women with high IQs but also contribute to the dissemination of harmful labels and misconceptions (Ellemers, 2018).

The influence of marital dynamics on women's careers warrants further examination. Specifically, men in traditional marriages—married to women who are not em-

ployed—disfavour women in the workplace and are more likely than the average of all married men to make decisions that prevent the advancement of qualified women (Desai et al., 2014). Moreover, it is essential to acknowledge the unique challenges women encounter in marriage, particularly regarding childcare responsibilities. They are still faced with the awkward dilemma of choosing between family and personal development. The majority of mothers, for instance, who choose to breastfeed do not have specialised nursing rooms or support when they return to work (Maharani & Mardiana, 2023). Alongside technological advancements, the advent of artificial intelligence (AI) has been recognised as a potential catalyst for gender equality. Despite its promising capabilities, it is essential to recognise that current AI applications often amplify existing biases, particularly regarding gender bias against women(Nadeem et al., 2020). Research has demonstrated that AI systems may maintain the bias that men are more suited for careers in the fields of Science, Technology, Engineering, and Mathematics (STEM) despite evidence suggesting the potential for gender parity within these industries (Prates et al., 2020). This may be because only 22% of AI professionals globally are female, compared to 78% who are male (World Economic Forum, 2024). There is no doubt that if we are unaware of these potential issues, the application of AI technology, instead of helping us eliminate gender inequality, is a gas pedal.

5. Conclusion

In alignment with John Locke's liberalist perspective, the decision to marry or remain single, irrespective of gender identity, should be regarded as a personal choice deserving of respect and recognition (Numao, 2021). However, it is crucial to recognise the complexities posed when analysing the impact of IQ on marriage rates across different genders. In light of the challenges faced by women and other marginalised groups in personal development and marital rights, society must take a proactive stance in providing comprehensive support and promoting equal opportunities. By actively addressing these explicit or implicit disparities, we can foster a more inclusive and diverse environment that values and protects the rights of all individuals. This commitment to advancing equity empowers marginalised communities and contributes to the development of a more sustainable and resilient society that benefits all its members. Of course, this study has limitations and does not consider LGBTQ+ populations or non-binary gender-defined populations. Hopefully, more attention can be paid to these groups in future studies.

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