

The impact of IQ on marriage rate: an analysis based on different gender perspectives

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Abstract:

The institution of marriage is one of the oldest human institutions. Nowadays, it appears that the institution of marriage is experiencing a gradual transformation for the majority, transitioning from a societal “necessity” to a discretionary “luxury. Some research indicates that divergent attitudes toward marriage exist between men and women. Men with higher IQs are more likely to marry, while the opposite is true for women. In order to analyze this phenomenon, based on the perspective of evolutionary psychology and cognitive physiology, this paper analyzes the physiological characteristics, cognitive differences, and social culture between men and women and elaborates the reasons for this difference in detail. Finally, some suggestions for future research are put forward.

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

1. Introduction

Nowadays, it appears that the institution of marriage is experiencing a gradual transformation for the majority, transitioning from a societal “necessity” to a discretionary “luxury.” However, research indicates that divergent attitudes toward marriage exist between men and women, with these perspectives contingent upon intelligence (Prokosch et al., 2009). Specifically, these findings suggest a positive correlation between higher intelligence and increased likelihood of marriage for men, whereas, for women, the inverse is observed.

Marriage is 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 recognized responsibility for any offspring as well as for each other. (VandenBos, 2007). Intelligence Quotient, or IQ, measures a person’s cognitive abilities concerning their age group. An individual’s IQ is commonly assessed using standardized tests to evaluate various intellectual skills, including logical reasoning, problem-solving, mathematical ability, and linguistic capacity (Neisser et al., 1996). Undoubtedly, attaining an advanced educational credential can be regarded as a tangible demonstration of elevated intellectual aptitude (Brody, 1997).

The differential impact of high IQ on marriage rates for men and women can be best understood in gender role expectations, socio-cultural norms, and evolutionary psychology. As a result, In this paper, interdisciplinary

insights of evolutionary psychology and cognitive psychology are adopted to elucidate the role of intelligence in influencing marital rates among males and females. This paper also highlights the significance of promoting gender parity in employment opportunities and fostering a sustainable social environment, prioritizing women’s community needs and aspirations.

2. The perspective of evolutionary psychology

Evolutionary psychology is an approach that views human cognition and behavior in a Darwinian natural selection context of adjusting to adapt to evolving physical and social environments and new intellectual challenges (VandenBos, 2007). Under the umbrella of evolutionary psychology, the sexual selection theory explains how different gender preferences for certain individual traits help increase the chances of successful mating and passing on genetic information. This theory explains how IQ levels influence marriage rates differently between genders (Buss, 1989). High intelligence is one of the attractive traits of men. According to Prokosch’s findings, women prefer a partner with high intelligence and kindness, which are associated with an advantageous social status and income, backing more security in the future family building; on the other hand, most males, for both short and long-term relationships, prioritize physical attractiveness over intelligence as the most critical measure (Prokosch et al., 2009). Furthermore, men have been observed to view a high level of intelligence in women negatively, as it often

correlates with higher social status and greater economic independence (Eagly & Wood, 2012; Karbowski et al., 2016). These qualities conflict with the traditional gender role of a female caregiver, causing potential discomfort among men who have demonstrated a preference for traditional female roles (Buss, 1989; Fisman et al., 2006). This factor, in turn, has been observed to reduce the inclination for women with such qualities to enter marriage.

Parental investment theory is another evolutionary psychology factor that illustrates the causes of the different tendencies. From a resource distributional point of view, this theory seeks to explain that males and females have differential investments in producing offspring. Women have a higher investment in procreation, so they tend to be more cautious and selective than men in choosing a mate (Trivers, 1972). The asymmetrical parental investment theory findings have offered further insight into the underlying concerns about marriage for educated women. In a traditional family structure, women take on more housework or the children's caretaker role, albeit some wives are more capable breadwinners than their partners. These childcare responsibilities further cement the existing stereotypes and societal expectations (Eisend, 2010; Goffman, 1979). Such segmental expectations being prioritized as caretakers of children have yet diminished from current marriages (Whyte & Brooks, 2021). A popular example in the consumer market is how most baby product advertisements feature dominantly female figures. This unilaterally accustomed marketing strategy unintentionally reinforces the perception of the traditional caring role of women in the internal family structure. Highly educated women, who often have greater economic independence and professional ambitions, tend to be less willing to marry due to the high opportunity cost of child-rearing (Kanazawa, 2005). In relation to such social patterns, a recent study reveals that a great number of educated women delay marriage and childbirth, valuing career prospects and individual growth over traditional domestic roles (Stone et al., 2018). Conversely, men, whose traditional role involves protecting and providing for the family, are not perceived to be negatively affected, allowing space for further self-realization through professional pursuits.

3. The perspective of cognitive psychology

In addition to taking into account biological instincts and changing external circumstances, the internal perceptions of the sexes can also have a huge impact. Cognitive psychology explores the operation of mental processes related to perception, attendance, thinking, language, and memory, mainly through inferences from behaviors (VandenBos,

2007). In addition, the self-determination theory emphasizes the role of autonomy, competence, and relatedness in individual motivation when making accounting decisions (Ryan & Deci, 2017). The socio-cultural impact on women's cognitive weighing process in terms of autonomy and child-rearing aspirations is also recognized.

According to the cognitive dissonance theory, people, including women of high intelligence, are motivated to maintain consistency among elements in their cognitive systems. When inconsistency occurs, people experience unpleasant psychological states that motivate them to reduce the dissonance in various ways (Festinger, 1957). The need for autonomy and competence often might conflict with traditional marital roles for highly intelligent women, leading to a lower desire to marry (Herkelmann et al., 1993). Conversely, educated men might find that marriage satisfies their need for relatedness and complements their sense of competence and autonomy in providing for a family (Tharp, 1963). For women with high IQ, societal expectations may conflict with innate prioritized personal aspirations, such as career advancement and personal growth, leading to cognitive dissonance (Simon & Nath, 2004). Dissonance exists in the long term as women grow up, whether on campus or in the workplace. Women in school and the workplace, especially in STEM (Science, Technology, Engineering and Mathematics) fields, often face gender-related discrimination and societal expectations that differ from their male colleagues (Pew Research Center, 2021; Obura & Ajowi, 2012). A qualitative investigation into women's psychological motives to pursue oocyte cryopreservation or engage in assisted reproductive interventions reveals that women's primary considerations revolve around the challenges of reconciling professional commitments with childbearing responsibilities (Miner et al., 2021). Such a social environment has led to cognitive dissonance among smart women, resulting in a decrease in marriage rates

For men, sociocultural expectations of marriage also pose certain challenges. However, these challenges generally do not result in significant cognitive dissonance. Men often view marriage as a milestone aligned with their personal and professional development rather than a restriction on their autonomy or career aspirations. Some studies have found that this perspective minimizes the internal conflict or cognitive dissonance men experience while reconciling marriage with their personal goals and societal roles (Rhoads, 2004; Schwartz, 2013). The societal narrative theory supports that "marriage complements rather than conflicts with male professional and personal growth, reinforcing traditional gender roles and expectations" (Gerson, 2010). Marriage presents men with additional benefits, including societal perceptions of increased

responsibility, positive social evaluations, and enhanced career opportunities such as promotions and raises (Gough & Noonan, 2013). This is supported by quantitative research indicating that employers and colleagues often view married men more favorably, translating into tangible workplace advantages (McDonald, 2020). These benefits are partly rooted in traditional gender norms that associate marriage with stability and maturity, thereby enhancing a man's social capital and perceived reliability for women and vice versa (Berk, 2018).

Given modern advances in technology, some may argue that thanks to non-gender-biased criteria and norms adopted in the workplace, gender equality should be improving. The potential of artificial intelligence (AI), which refers to the capability of computer systems or algorithms to imitate intelligent human behavior, such as learning, judgment, and decision-making, to promote gender equality as an objective third party, has been widely discussed (Newstead et al., 2023). However, research indicates that AI systems constantly perpetuate significant biases in leadership development. AI algorithms can reflect and even amplify existing societal prejudices, including those related to gender, as proved by studies (Bolukbasi et al., 2016; Caliskan et al., 2017). For instance, AI in hiring processes has been found to favor male candidates over equally qualified female candidates due to training data bias (Raghavan et al., 2020). Also, generative AI has been found to consistently depict male candidates as charismatic or reliable but female candidates as vulnerable and ineffective (Newstead et al., 2023). AI algorithms, designed to replicate human decision-making processes, inherently incorporate existing gender biases in their training data. This phenomenon can be attributed to the under-representation of women employees in the technology industry. Empirical evidence further corroborates the existence of a more pronounced glass ceiling effect for female employees in high-tech companies (Al-Najjar & Salama, 2022). Despite their intellectual prowess and professional capabilities, women are often subjected to societal expectations of prioritizing marriage and family responsibilities, which can inadvertently impede their career progression (Kuschel & Labra, 2018). Consequently, they may not receive the equitable treatment and opportunities they deserve within the workplace. If these biases are not actively identified and mitigated, AI systems will not only fail to eliminate gender discrimination but also lead to more profound societal inequalities (Bolukbasi et al., 2016; Noble, 2018). Thus, it is highly questionable that the primary concerns of women regarding workplace inequality are to be effectively addressed and resolved.

4. Conclusion

A high degree of freedom for all aligns with John Locke's principles of libertarianism as he once asserts, "The state of nature...which obliges everyone...that being all equal and independent, no one ought to harm another in his life, health, liberty, or possessions..." (Locke, 1690). Locke's advocacy for individual liberty and self-determination is compatible with the trend that advocates autonomy for women, as well as any gender-identified individuals, whether or not to marry (Wolterstorff, 1996). Concerns regarding potential career disruptions due to child-rearing, alongside an absence of suitable partners, emerge as crucial determinants influencing women's choices in this domain (Kanters et al., 2022). It is vital to recognize that establishing a stable familial environment plays a pivotal role in fostering the holistic development of children (Andermo et al., 2020).

In conclusion, the different relationship between intelligence level and marriage rate for men and women results from evolutionary psychology, cognitive psychology, and socio-cultural factors. In spite of such insight supported by empirical evidence, it is imperative to remain cognizant of the underlying social complexities and reclusive issues that may not be immediately apparent from a purely data-driven analysis. The binary conceptualization of gender and the primary emphasis on women's perspectives may inadvertently exclude the experiences of individuals who identify outside this dichotomy, ranging from those of men to other marginalized communities. From the perspective that IQ has different impacts on marriage rates between genders, there is still a lot of work to be done in terms of gender equality in society. To further promote gender equality, future research shall adopt an intersectional approach to ensure the voices and concerns of all affected parties are duly represented and addressed.

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