

Evolutionary Psychology: An Analysis of the Multifaceted Factors Influencing Women's Mating Preferences

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Abstract: Mate choice is pivotal in shaping the quality of marriages and family structures. This paper explores the psychology behind women's selection of spouses in the context of evolving societal norms and gender roles, particularly within the dynamic landscape of contemporary China. Drawing upon evolutionary psychology, sociology, and social learning theories, it investigates the multifaceted factors influencing women's mating preferences, including biological characteristics, socioeconomic status, and personality traits. Additionally, the paper examines the role of familial influence, societal expectations, and gender roles in shaping mate selection criteria. Through a comprehensive literature review and theoretical analysis, this study contributes to a deeper understanding of the complex interplay between individual psychology, social dynamics, and cultural contexts in the process of mate selection.

Keywords: Mate choice, Women's mating preferences, Evolutionary psychology, Socioeconomic status, Psychological mechanisms

1. Introduction

Mate choice, as a prerequisite for the conclusion of marriage and the establishment of a family, directly affects the quality of the marriage and the form of the family. It is a very important part of the marriage process; at the same time, the choice of spouse is an institution that is more susceptible to the influence of the external social environment.

1.1. Research Background

With the accelerated development of Chinese society, people's ideas are becoming increasingly diverse. In contemporary culture, the psychology of choosing a spouse is rooted in historical and traditional culture and is increasingly influenced by Western thought. The study of companion selection in China began in the previous century. Reform and opening up changed the traditional "arranged marriage" form of marriage, meaning that men and women of the appropriate age have the freedom to choose their spouses, particularly women, for the first time in thousands of years. Break into shorter sentences. However, chaotic phenomena have emerged in China's families and marriages

as the economy and society have developed. Such phenomena include the rising divorce rate, the problem of older "leftover women," and the phenomenon of "gold-digging," which have been criticized by society.

In China, however, research on women's choice of spouse has focused more on sociology and social psychology, and the study of relationships between groups or more than two individuals has been emphasized more. Generally speaking, there is a lack of research in psychology on the individual psychology of women's choice of spouse, especially because empirical research is very scarce. Even if some sporadic studies are not supported by a systematic theoretical framework and seem to lack sufficient explanatory power and systematicity.

1.2. Research Significance

With the rapid development of society, people have access to a more diversified range of ideas and cultures. At the same time, women's social roles and socioeconomic status are changing, and women's mating preferences have changed as a result. This paper investigates the factors influencing women's mating preferences through evolutionary psychology, which has important theoretical and practical significance.

To some extent, this paper provides a different perspective on the issue by focusing on the evolutionary psychology perspective. It enriches the research content and is of pioneering and crucial theoretical significance.

From another perspective, this paper provides a deep understanding of women's mating preferences, psychological mechanisms, and influencing factors by combining domestic and foreign research paradigms and measurement methods. It has practical significance.

1. Provides a deep understanding of why certain traits are sought among potential mates. This information may reveal people's evolutionary minds and better shape the understanding of human behavior.

2. Women's mating preferences remarkably influence their choice of romantic partners. Researching these preferences provides insight into the factors that contribute to relationship formation and stability. It also guides relationship counseling and promotes positive relationships.

3. Women's mating preferences are influenced by social development. Investigating the factors helps people know the situation of the society, and formulate instructional strategies.

2. Literature Review

2.1. Theoretical Review

2.1.1. The Origin and Definition of Mating

Mate choice is the act of selecting a prospective spouse for marriage. Diverse schools of psychology have analyzed the phenomenon of mate selection from a variety of perspectives, resulting in various definitions of the process. Charles Darwin, in his 1859 work expounding on the theory of evolution, argued that "sexual selection" is an interaction between members of a species that advances behavioural conditioning. Darwin argued that both male and female individuals face unique "adaptive problems" in their pursuit of resources or mates for successful reproduction [1]. These challenges lead to the emergence of distinctive preferences and behavioral patterns in mate selection. Edwards defines mate selection as an exchange behavior where both parties obtain reciprocity by exchanging resources [2]. Trivers asserts that mate selection is a subjective experience, while Eshleman agrees that it is based on exchanging resources but presents it as a subconscious or unconscious level of choice distinct from conscious bargaining in the marketplace [3].

2.1.2. The Theories of Mating

2.1.2.1. Mate Choice Gradient

The theory of "mate choice gradient" refers to the fact that in choosing a mate, women will require their spouses to be better than themselves in terms of education, career development, social status, etc., while on the contrary, men are more willing to marry women who are slightly less capable than or equal to them, that is, the phenomenon of "men looking for lower and women looking for higher" that is often found in the marriages. Society has different expectations of gender roles for men and women, and this has led to the longstanding promotion of the family model of "the male working outside to provide financial support for the family and the female staying at home to organize domestic issues". Although men are usually in charge of financial income and have the upper hand in the family, women can use their appearance, body shape, skin color, and ability to run the household as capital in exchange for room to grow.

2.1.2.2. Parent Idol Theory

Freud created the Parental Idol Theory from a psychoanalytic perspective that emphasizes the influence of physiological and psychological motivations on mate selection based on individual traits. The theory suggests that parents subtly influence the mate selection criteria of the next generation. Due to the "Oedipus Complex", a boy will choose a girl with a similar personality to his mother as his partner. Similarly, a girl will prefer to date a boy with a similar personality to her father due to the "Oedipus Complex". Subsequently, many social psychologists have added to this theory; for example, Pogetvelin, based on his research, concluded that the majority of people are prone to develop feelings for the parent they were close to when they were young or for another person who played a similar role of guardianship. However, many scholars are skeptical of the parental idolization theory, believing that it is a product of the theorist's subjective thinking and that its practical significance remains to be further considered.

2.1.2.3. Structural Powerlessness

Representatives of social learning theory suggest that the forces of socialization and differences in social status shape the choice of a spouse for different gender groups [4]. From the perspective of socio-economic status, women are often at a disadvantage and, therefore, need to rely on economically powerful and well-educated men to gain a better right to live. With the advantage of social resources, men have more freedom to choose women who meet their aesthetic and sexual needs. As a result, women become accustomed to choosing men based on their economic strength and ability to provide protection rather than on their physical appearance. Men become accustomed to the experience of having younger, more attractive women as mates.

2.1.3. A Theoretical Model of Mate Selection Strategy

2.1.3.1. Parental Investment Theory

The parental investment theory posits that investing in an offspring improves their odds of survival but diminishes the parent's ability to invest in other offspring. The sex that makes greater investments in their offspring tends to discriminate more when selecting a mate, whereas the sex that invests less experiences competition for mating opportunities within their sex [5].

2.1.3.2. Sexual Strategies Theory (SST)

Sexual strategy theory provides an explanation for these adaptive problems and views human sexual psychology as a rich set of mechanisms that evolved as adaptive solutions. From Darwin's natural selection theory to today's various sexual relationship goals, different species use multiple strategies to attract better mates [6].

2.1.3.3. Good-Gene-Theory

Sexual Strategies Theory provides an explanation for these adaptive issues and presents a perspective on human sexual psychology as a diverse collection of mechanisms that have evolved as adaptive solutions. Diverse species use various tactics to attract better mates, from Darwin's natural selection theory to modern-day sexual relationship goals [6].

2.1.3.4. Dual-Model-Theory

The dual model theory integrates parental investment theory and good gene theory, which was proposed by Qian Tian in 2012. It holds that both parental investment and genetic factors are indispensable in the process of mate selection, and both influence the mate selection process [7].

2.1.3.5. Similarity Theory

The similarity theory is that humans prefer choosing a mate identical or akin to themselves or their families. There are two explanations for this theory. One is that people choose partners who are close to themselves or their relatives to increase the genetic similarity of their offspring. The other is that people are influenced by their opposite-sex parents when they are young and use their parents' image as a template for mate selection [7]. Either explanation fits with evolutionary psychology - the purpose of these behaviors is to pass on people's genes smoothly and effectively.

2.1.4. Research on Female Mate Selection Criteria

Women's criteria for choosing a spouse can be divided into three aspects: the criteria that reflect the biological characteristics of the potential partner, such as appearance; the socioeconomic characteristics that reflect whether the potential partner can invest well in future generations (including resources and the potential to obtain them); the criteria that reflect whether the potential partner has the personality characteristics that women desire, such as a fondness for children are essential. A single individual may not simultaneously satisfy all the criteria for selecting a spouse. The process of selecting a potential mate is essentially the result of a combination of these criteria.

2.1.4.1. Biological Characteristics — Good Genes

Biological characteristics refer mainly to human appearance, body shape, facial symmetry, masculinity, body odor, intelligence, and other traits that have less connection with the social attributes of human beings. The key to biological characteristics is that they reflect the criteria used by human beings as creatures to select potential mates and are closely related to human survivability and instincts. The Good Gene sexual selection theory explains that in the course of human evolution, some genetic variations are adapted to the natural environment and thus can be passed on to good genes [8]. Individuals with different genes are different in their ability to survive, which leads to different attention in the process of choosing mates. Individuals with good genes are always in an advantageous position in the process of choosing mates because their offspring are more capable of reproducing. However, human beings can't know who carries good genes with the naked eye, so the

only way to determine the goodness of genes in mate selection is to use some external indicators called good gene indicators.

2.1.4.2. Socio-economic Characteristics — Good Resources

Parents have to nurture and care for their young children, and for a woman to successfully reproduce and grow her offspring to adulthood, she must find a mate who can provide abundant life resources and invest in her offspring. At the same time, many specific preferences evolved. Throughout human evolutionary history, male patrilineal investment has been an important factor in offspring survival and health [9].

Because women are responsible for the care of their children, they invest in them directly, whereas men provide indirect support. Therefore, women need to evaluate the capacity of men to invest wisely in their offspring [10]. Indicators of good investment capacity include the possession of resources and the potential to acquire them [11]. Buss, 2008 measured the extent to which highly attractive women preferred several indicators of possible good investment capacity, including potential income, higher earning capacity, education level, ambition and diligence, higher social status, and slightly older age [12]. It indicates that potential income and age significantly correlate with women's inclination for men's appearance, physical characteristics, and overall manners. In contrast, education and earning power are positively correlated with overall preferences.

2.1.4.3. Personality characteristics — Good Fathers

When selecting a mate, besides the investment in resources, women also expect spouses to invest emotionally in their offspring, which refers to good parenting indicators. For example, women want their spouses to have qualities such as warmth and kindness that make them good fathers [13].

2.1.5. Research on Influencing Factors of Female Mate Selection

2.1.5.1. Family (Experience at an early age)

Parents may utilize their child's marriage to strengthen their ties to unrelated families or groups. As long as this kind of alliance benefits both the parent's family and the children, parents are expected to support these marriages more frequently than the offspring would [14].

Except in contemporary post-industrial countries, parents have traditionally had the most influence over their children's sexual behavior. The choice of in-laws has significant fitness repercussions for parents. Therefore, it is proved by Apostolou, 2007, that parents have developed certain preferences that allow them to choose in-laws who will optimize their inclusive fitness, through an online survey completed by 297 individuals, 225 women and 72 men, who were almost all citizens and inhabitants of the UK [15].

In a study by Bereczkei et. al that compared more than 300 facial images of family members and controls, the judges correctly matched spouses to their mother-in-law at a considerably greater rate than would be predicted by chance. More resemblance between the husbands' mother and their wives was noted than between the husbands and their wives. Based on regression analysis, it was discovered that males who experienced frequent rejection by their mothers during childhood were less likely to choose partners who physically resemble their moms. These results suggest that sons internalize their mother's physical traits as a template for selecting compatible partners due to early experiences [16].

2.1.5.2. Mate Value

Finding a mate is like the stock market, with both male and female players trying to maximize their interests. Potential partners try to reach agreements that will maximize their benefits from the transfer

of assets. Considering this interesting model, it can be inferred that women's mate selection values are very important when choosing a mate [17].

Regan's experiment proves this. He gathered 72 ethnically heterosexual college students, 40 of whom were women. He asked them to rate 32 random mate traits on a scale of 0 to 100 on short-term and long-term mate selection criteria, indicating the maximum and minimum amount of each trait they want in their mates. These criteria are further divided into interpersonal skill and responsiveness, physical attractiveness, social status, interpersonal power, and family orientation. The results and correlational analyses turned up that in both long-term and short-term relationship scenarios, a woman's self-perceived mate value was closely related to her preferences for the ideal spouse. Although the sample size of this experiment is small, it comes from different races, and the measurement method is effective [18].

2.1.5.3. Health

Health has been claimed as an important quality in choosing a mate. A healthy mate has direct benefits like a better chance to be fertile and pass high-quality genes, as well as good parenting and more resources. Foo, Simmons, and Rohdes conducted an experiment testing the impact of salivary immune function, oxidative stress, and semen quality on a person's attractiveness. The result clearly shows that a healthier person would be considered more suitable to be a mate and thus be more attractive [19].

2.2. Gender Roles

A gender role, alternatively referred to as a sex role, is a social role encompassing behaviors and attitudes that are generally viewed as acceptable, appropriate, or desirable based on an individual's sex [20]. An area where gender roles significantly influence women's mating preferences is the allocation of responsibilities between providing resources and performing household chores [21].

Traditional gender roles in industrialized societies typically assign men as the primary financial provider and women as the primary caregiver. Widespread societal agreement on this division guides a marital trade-off between women's domestic labor and men's wage labor. However, due to a weakened societal consensus about this arrangement in modern times, personal expectations for marital roles are inevitably evolving [22].

This study analyzes the impact of balancing family and career on the mate selection of heterosexual women. Technical term abbreviations are explained when first used. The text follows formal register, conventional structure, and clear, objective language with accurate grammar and precise word choice. A sample of 360 Canadian women aided in testing hypotheses regarding desirable traits in a potential mate. The research emphasizes the importance of both similar and complementary traits. Consistent citation is used in accordance with style guides and formatting features. Bias is avoided through the use of hedging language. The study specifically examines women's expected roles as primary providers and/or caregivers in future partnerships as significant predictors of mate preferences. The study reveals the intricate nature of long-term romantic partner preferences among young, heterosexual women. The research is conducted in Canada and involves a significant sample size of 360 participants. However, the lack of participant classification results in uncertain findings.

2.3. Socio-economic Status

The idea of capital perhaps best embodies the current meaning psychologists hold of SES [23][24][25]. Capital (resources, assets) has become a favored way of thinking about SES because access to financial capital (material resources), human capital (nonmaterial resources such as

education), and social capital (resources achieved through social connections) are readily connectible to processes that directly affect well-being.

According to Bradley and Corwyn, socioeconomic differences can affect child development in multiple ways. From the most basic and easily understood one—resources, there are more under this category. Health is the most concerning trait in a person’s life [26]. A child from a lower SES family would have a higher risk of getting injured or infected because of the polluted environment. As the child grows, their accessibility to higher or better education is limited. They also face the difficulty of expressing the symptoms of emotional distress and negative pressure relief ability.

Evita March and Rachel Grieve studied 782 Australians, including 550 women, with varying levels of education using an online questionnaire [27]. Budget (two levels: low and high) served as the within-subjects variable for the mixed measures design, while SES (three levels: low, medium, and high) and gender roles (four levels: masculine, feminine, androgynous, and undifferentiated) served as the between-subjects variables. Physical attractiveness, inventiveness, friendliness, liveliness, and social level were the dependent variables for the percentage of the mate budget spent on each trait. Unfortunately, the findings suggest that SES, gender roles, and women's short-term mate choice do not have an independent or interactional effect. Even though this study and questionnaire mainly focus on short-term mate selection and the samples are mainly from Australia, the research methods of SES and mate selection preference in this experiment can be used and used for reference.

3. Experiment Plan

Convenience sampling will be used during the process; 500 female college students will complete a questionnaire, which asks them to rate traits they are looking for when finding mates by using a Likert scale from -3 to 3, indicating least important/valuable to most important/valuable, as shown in Table 1. The survey is based on the Likert scale used by Tian in her paper, *A Study on Chinese Women's Mate Choice Tendency I. An Interpretation Based on the Psychology of Heterosexualization* in 2012, and the content (traits to be evaluated) is adapted to fit Chinese society. This questionnaire clearly indicates that it’s just for research purposes. It would also require the participants to write about their demographic information, for instance, age and education level. Since the participants might feel uncomfortable mentioning some traits, another method of research was used.

Table 1: The Likert scale used by Tian

(-3= not important at all, 3= extremely important, indispensable, from -3 to 3 indicates increasing importance)

Serial number	Conditioned trait	Long-term partner						
		-3	2-	-1	0	1	2	3
		Totally unimportant	Less important	A little unimportant	Not to matter	It's a little important	Relatively important	It is extremely important
1	Have a car and a house	○	○	○	○	○	○	○
2	Easy-going	○	○	○	○	○	○	○
3	Tolerant and open-minded	○	○	○	○	○	○	○
4	Be handsome/handsome	○	○	○	○	○	○	○
5	Job stability	○	○	○	○	○	○	○

4. Conclusion

In conclusion, the field of evolutionary psychology offers valuable insights into the intricate web of factors influencing women's mating preferences. As societal norms shift and human cultures evolve, understanding these preferences becomes increasingly pertinent. In this research paper, the relationship between the SES & gender role and women's mating selection is focused. In this new era in which the SES and gender roles for women are rapidly changing, this paper designs a survey to further explore this relationship.

Moreover, the influence of early familial experiences, societal expectations, and socioeconomic status cannot be overlooked. Parents play a significant role in shaping their children's perceptions of ideal partners, while broader societal shifts challenge traditional gender roles and redefine expectations within relationships. Through empirical research and theoretical frameworks, this paper has provided a deeper understanding of the mechanisms underlying women's mate selection. By shedding light on these dynamics, we not only gain insight into human behavior but also pave the way for practical applications in relationship counseling and societal interventions.

Moving forward, further research in this field is crucial for navigating the complexities of modern relationships and addressing the challenges posed by evolving cultural landscapes. By continuing to explore the interplay between evolutionary psychology and social dynamics, we can foster healthier, more fulfilling relationships in diverse societies.

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Qi Cao and Hongmi Jiang contributed equally to this work and should be considered co-first authors

References

- [1] DARWIN, C. (2019). *Origin of species*. BIG CHEESE Books.
- [2] Edwards J. (1969). Familial behaviors as social exchange. *J. Marriage Fam.* 31, 518–526. 10.2307/349775
- [3] Eshleman, A. (2004). Responsibility for character. *Philosophical Topics*, 32(1/2), 65-94.
- [4] Hayes A. F. AGE preference for same-sex and opposite-sex partners[J. *Journal of social psychology*.1995.135:125-133.]
- [5] Trivers, Robert L. "Parental investment and sexual selection." *Sexual selection and the descent of man*. Routledge, 2017. 136-179.
- [6] Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. *Journal of Sex Research*, 35(1), 19-31. <https://doi.org/10.1080/00224499809551914>
- [7] Tian Qian. (2012). *Research on Chinese women's mating tendency [D]* (Doctoral dissertation, Fudan University).
- [8] Gangestad, Steven W. "Sexual selection, good genes, and human mating." *Conceptual Challenges in Evolutionary Psychology*, 2001, pp. 143–178, https://doi.org/10.1007/978-94-010-0618-7_6.
- [9] Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12(1), 1–14. <https://doi.org/10.1017/s0140525x00023992>
- [10] Brase, Gary L. "Cues of parental investment as a factor in attractiveness." *Evolution and Human Behavior* 27.2 (2006): 145-157
- [11] Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232.
- [12] Buss, David M., and Todd K. Shackelford. "Attractive women want it all: Good genes, economic investment, parenting proclivities, and emotional commitment." *Evolutionary Psychology*, vol. 6, no. 1, 1 Jan. 2008, p. 147470490800600, <https://doi.org/10.1177/147470490800600116>.
- [13] La Cerra, Peggy, and Robert Kurzban. "The structure of scientific revolutions and the nature of the adapted mind." *Psychological Inquiry* 6.1 (1995): 62-65.
- [14] TRIVERS, ROBERT L. "Parent-offspring conflict." *American Zoologist*, vol. 14, no. 1, Feb. 1974, pp. 249–264, <https://doi.org/10.1093/icb/14.1.249>.
- [15] Apostolou, Menelaos. "Parent-offspring conflict over mating: The case of family background." *Evolutionary Psychology*, vol. 6, no. 3, 1 July 2008, p. 147470490800600, <https://doi.org/10.1177/147470490800600310>.

- [16] Bereczkei, T, et al. "Homogamy, genetic similarity, and imprinting; parental influence on mate choice preferences." *Personality and Individual Differences*, vol. 33, no. 5, Oct. 2002, pp. 677–690, [https://doi.org/10.1016/s0191-8869\(01\)00182-9](https://doi.org/10.1016/s0191-8869(01)00182-9).
- [17] Cameron, Samuel, and Alan Collins. "Estimates of a hedonic ageing equation for partner search." *Kyklos*, vol. 50, no. 3, Aug. 1997, pp. 409–418, <https://doi.org/10.1111/1467-6435.00023>.
- [18] Regan, Pamela C. "What if you can't get what you want? willingness to compromise ideal mate selection standards as a function of sex, mate value, and relationship context." *Personality and Social Psychology Bulletin*, vol. 24, no. 12, Dec. 1998, pp. 1294–1303, <https://doi.org/10.1177/01461672982412004>.
- [19] Foo, Y. Z., Simmons, L. W., & Rhodes, G. (2017). The relationship between health and mating success in humans. *Royal Society Open Science*, 4(1), 160603. <https://doi.org/10.1098/rsos.160603>
- [20] Levesque, Gabrielle. "Care, Gender Inequality and Resistance : A Foucauldian Reading of Carol Gilligan's Ethic of Care." T. University of British Columbia, 2013. Web. 1 July 2024. <<https://open.library.ubc.ca/collections/ubctheses/24/items/1.0074112>>. Electronic Theses and Dissertations (ETDs) 2008+.
- [21] Croft, A., Schmader, T., Beall, A., & Schaller, M. (2019). Breadwinner Seeks Bottle Warmer: How Women's Future Aspirations and Expectations Predict Their Current Mate Preferences. *Sex Roles*, 82(11-12). <https://doi.org/10.1007/s11199-019-01080-6>
- [22] Eagly, A. H., Eastwick, P. W., & Johannesen-Schmidt, M. (2009). Possible Selves in Marital Roles: The Impact of the Anticipated Division of Labor on the Mate Preferences of Women and Men. *Personality and Social Psychology Bulletin*, 35(4), 403–414. <https://doi.org/10.1177/0146167208329696>
- [23] Coleman, James S. "Social Capital in the creation of human capital." *American Journal of Sociology*, vol. 94, Jan. 1988, <https://doi.org/10.1086/228943>.
- [24] Entwisle, Doris R., and Nan Marie Astone. "Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status." *Child Development*, vol. 65, no. 6, Dec. 1994, p. 1521, <https://doi.org/10.2307/1131278>.
- [25] Guo, Guang, and Kathleen Mullan Harris. "The mechanisms mediating the effects of poverty on children's intellectual development." *Demography*, vol. 37, no. 4, 1 Nov. 2000, pp. 431–447, <https://doi.org/10.1353/dem.2000.0005>.
- [26] Bradley, Robert H., and Robert F. Corwyn. "Socioeconomic status and child development." *Annual Review of Psychology*, vol. 53, no. 1, Feb. 2002, pp. 371–399, <https://doi.org/10.1146/annurev.psych.53.100901.135233>.
- [27] March, Evita, and Rachel Grieve. "Social-Economic theory and short-term mate preferences: The effects of gender roles and socioeconomic status." *Australian Journal of Psychology*, vol. 68, no. 4, 1 Dec. 2016, pp. 241–250, <https://doi.org/10.1111/ajpy.12102>.