

Is Beauty Good? The Role of Physical Attractiveness in Intimate Relationships

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Abstract

Physical attractiveness exerts a non-negligible influence on the establishment and development of intimate relationships. Individuals with high physical attractiveness are perceived as possessing more socially desirable traits and superior genes, and are consequently regarded as having higher mate value, thereby effectively facilitating relationship formation. However, during relationship development, mismatched physical attractiveness may prompt the less attractive partner to engage in a series of mate retention behaviors, jealousy, insults, and sexual coercion, thus accelerating relationship dissolution. Additionally, some research indicates that highly attractive males may not possess superior genes, and females do not exhibit a preference for highly attractive males during their peak fertility period. The notion that “what is beautiful is good” is increasingly being challenged, research findings have generated considerable controversy and divergence, and direct empirical evidence remains to be further consolidated.

Full Text

What is Beautiful is Good? The Role of Physical Attractiveness in Intimate Relationships

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Abstract

Physical attractiveness plays a significant role in the formation and development of intimate relationships. Because individuals with high physical attractiveness are perceived as possessing more socially desirable traits and superior genes, they are regarded as having higher mate value, which effectively facilitates relationship establishment. However, during relationship development, mismatched physical attractiveness may lead the less attractive partner to engage in mate

retention, jealousy, insults, and sexual coercion behaviors, thereby accelerating relationship dissolution. Some studies also suggest that highly attractive men may not possess good genes, and women do not show stronger preferences for highly attractive men during peak fertility periods. The view that “what is beautiful is good” is being challenged, research findings have sparked considerable controversy and divergence, and relevant direct evidence remains to be further consolidated.

Keywords: physical attractiveness; mate value; mate retention

“The ospreys call on the islet in the stream; a graceful and beautiful maiden is a fine match for a gentleman.” Since ancient times, beautiful women have been sought after as ideal partners.

Burns and Farina (1987) used A-R-D theory to explain the three functional attributes of physical attractiveness: attitude, reinforcement, and directive. They proposed that high physical attractiveness increases others’ positive emotions through eliciting pleasant emotional experiences (attitude), thereby reinforcing (positive reinforcement) these positive feelings and motivating others to approach (directive) attractive individuals (e.g., talking, smiling, dating). In intimate relationships, physical attractiveness often serves as the catalyst for a romance to begin (Buss & Schmitt, 1993; Lee, Loewenstein, Ariely, Hong, & Young, 2008). People tend to choose partners who are more physically beautiful or handsome, and individuals with higher physical attractiveness find it easier to secure partners (Rhodes, Simmons, & Peters, 2005). Physical attractiveness effectively promotes relationship development and accurately predicts positive outcomes (Langlois et al., 2000). However, the role of physical attractiveness in intimate relationships has attracted increasing scholarly attention, and the view that “what is beautiful is good” is being questioned, with research findings generating considerable controversy and divergence.

1. What is Beautiful is Good: Advantages of High Physical Attractiveness in Intimate Relationships

Dion, Berscheid, and Walster (1972) proposed the “What is beautiful is good” hypothesis, which was the first to explain why people prefer highly attractive individuals. This preference for physical attractiveness has significant impacts across business, politics, and law, influencing economic trends, electoral preferences, and even legal judgments (Olivola, Funk, & Todorov, 2014; Poutvaara, 2014; Stockemer & Praino, 2015, 2017). People make more positive evaluations of highly attractive individuals, attributing more positive personality traits to them (Lorenzo, Biesanz, & Human, 2010). Even when individuals do not actually possess these positive traits, they can still “profit” from this perception. For example, physical attractiveness influences monetary decision-making, with people accepting more unfair monetary distribution offers from highly attractive individuals (Ma, Hu, Jiang, & Meng, 2015; Ma, Qian, Hu, & Wang, 2017).

Highly attractive individuals are also more favored in hiring, with higher success rates and greater promotion opportunities (Desrumaux, De Bosscher, & Léoni, 2009; Tsai, Huang, & Yu, 2012). These characteristics of high physical attractiveness promote others' willingness to approach, thereby facilitating the establishment of intimate relationships.

Lee et al. (2008) analyzed member data from the popular American dating website HOTOorNOT, examining two datasets: “dating requests” (the degree to which individuals wanted to date others after viewing their photos and profiles) and “attractiveness ratings” (the attractiveness scores of both individuals). They found that for every one-level increase in a potential partner's attractiveness rating, the probability of an individual agreeing to a date request increased by approximately 130%. Compared to female participants, male participants were 240% more likely to agree to date requests from women. The results suggest that high physical attractiveness increases others' intention to date an individual, with more attractive people more easily initiating new romantic relationships. Men, like the frog prince, tend to disregard their own attractiveness level and prefer to date women with higher physical attractiveness. As an important mate selection criterion, physical attractiveness influences partner choice preferences and significantly impacts relationship formation. Researchers from evolutionary and social psychology perspectives have explained why individuals prefer highly attractive partners, what physical features characterize high attractiveness, and how attractiveness is used to exchange for resources, illuminating how high physical attractiveness promotes relationship establishment.

1.1 Evolutionary Psychology Perspective

Evolutionary psychology focuses on how evolved psychological mechanisms mediate between evolution and behavior. These evolved psychological mechanisms are adaptations designed to solve specific adaptive problems that repeatedly emerged throughout evolutionary history, such as mate selection (Jiang & Xiong, 2010). Preferences for physical attractiveness serve as human adaptations that effectively facilitate mate selection. Maestripieri, Henry, and Nickels (2017) explained preferences for high physical attractiveness from different evolutionary psychology perspectives. First, they noted that the preference for high physical attractiveness is functional, serving to approach attractive individuals and increase the likelihood of becoming their mate. In other words, highly attractive individuals are perceived as potential mates, motivating people to approach them. Second, preferences for physical attractiveness reflect certain “sexual signaling” features in target individuals that make them more attractive. Mate value theory explains why highly attractive individuals are viewed as potential mates, while sexual selection theory further clarifies what features they possess. Together, these theories explain why individuals exhibit prosocial behavior toward highly attractive potential mates—a phenomenon that can be interpreted as courtship behavior evolved to increase mating opportunities with attractive individuals.

1.1.1 Mate Value Theory An individual's value as a potential partner to others is called mate value (Edlund & Sagarin, 2010), which encompasses health status (health, age, fertility), phenotypic condition (physical attractiveness), genetic quality (sperm and egg quality), and resource possession (social status, current and expected economic capacity) (Howie & Pomiankowski, 2018). Previous research has employed various methods to assess mate value, broadly categorized into two approaches. The first method involves overall mate value judgments formed after individuals accurately perceive their own and others' mate value, such as asking "Overall, how would you rate your desirability as a mate to others?" The second approach uses one or more components of mate value as assessment criteria, with common factors including physical attractiveness, facial attractiveness, masculine features (e.g., vocal pitch), and feminine features (waist-to-hip ratio) (Edlund & Sagarin, 2014). Because accurately assessing overall mate value is difficult, researchers can only infer mate value from individuals' phenotypic and behavioral characteristics (Howie & Pomiankowski, 2018). Consequently, directly observable physical attractiveness is often regarded as an external indicator of internal mate value (Xu, 2016).

In mate selection, both sexes consider partner physical attractiveness an important criterion (Buss & Schmitt, 1993), though it has a greater impact on men's mate selection intentions. Men place more importance on partner physical attractiveness than women do, but previous research did not provide a vivid, concrete explanation of this difference in importance. Li, Bailey, Kenrick, and Linsenmeier (2002) used the concepts of "necessities" and "luxuries" to explain gender differences in physical attractiveness preferences. "Necessities" represent the most basic needs under conditions of low budget and high constraints, but as basic needs are met, budget increases, and constraints decrease, individuals' desire for necessities declines and their proportion in the budget shrinks. "Luxuries" refer to aspects that are unimportant under low-budget, high-constraint conditions but become increasingly desired as basic needs are satisfied. Li, Valentine, and Patel (2010) argued that partner physical attractiveness is a "necessity" for men. Even in low-budget, high-constraint situations, men prioritize partner physical attractiveness. This preference is not constrained by their own attractiveness level—regardless of how attractive they are, men want to date women with higher physical attractiveness. Women, conversely, view physical attractiveness as a "luxury," only demanding it in male partners when they have sufficient resources to provide for offspring.

Women's mate selection decisions emphasize the matching principle (Todd, Penke, Fasolo, & Lenton, 2007), choosing male partners with similar attractiveness levels based on their own physical attractiveness (Lee et al., 2008). As an important component of mate value, physical attractiveness is often treated as an external indicator of individual mate value. Because the sexes emphasize different aspects of partner mate value—men value women's physical attractiveness while women value men's status and assets—gender differences in physical attractiveness preferences emerge. Men view physical attractiveness as a "necessity," so the higher a woman's physical attractiveness, the higher her mate

value and the greater her likelihood of becoming someone's partner. Women view physical attractiveness as a "luxury," but this does not mean they choose low-attractiveness men as future partners when choices are limited. Men only have the opportunity to be considered ideal partners when they possess moderate physical attractiveness (facial attractiveness) and ideal personality traits. Women do not view low-attractiveness men as suitable partners, even if they possess the most ideal personality traits (Agthe, Spörrle, & Maner, 2010).

1.1.2 Sexual Selection Theory Reproducing offspring is an instinctive behavior in all animals. To produce better offspring, nearly all animals employ various sexual selection behaviors aimed at finding higher-quality partners to ensure racial prosperity (Maner & Ackerman, 2015). As advanced primates, humans are no exception. Throughout evolutionary history, humans have tended to select mates who can produce more offspring with higher survival rates (Gangestad & Simpson, 2000). The mate quality hypothesis suggests that highly attractive women are perceived by men as high-quality partners (Zhang et al., 2010). Good genes theory explains that highly attractive men are believed to possess higher-quality, healthier genes (Gangestad & Simpson, 2000; Pillsworth & Haselton, 2006), which are markers of reproductive advantage and signify greater success in reproduction (Rhodes, 2006).

Based on sexual selection theory, individuals tend to select highly attractive opposite-sex partners. Physical attractiveness is a broad, abstract concept encompassing multiple feature dimensions. Beyond facial attractiveness, it includes body attractiveness, skin, voice, and other features that emphasize overall impression (Wen, 2016). Physical attractiveness is often divided into facial and body attractiveness. Facial attractiveness is a commonly used indicator that has proven to have equal or stronger predictive power than body attractiveness when measuring individual physical attractiveness (Meltzer, McNulty, Jackson, & Karney, 2014). Numerous studies use facial attractiveness to directly measure individual attractiveness levels (Burlinson, Hall, & Gutierrez, 2016; Butler, Saville, Ward, & Ramsey, 2017; Michał, 2018; Watkins, 2017). Facial attractiveness refers to the degree to which an individual's face elicits pleasant emotional experiences and motivates others to approach (Kou et al., 2013). Research indicates that faces are considered more attractive when they possess averageness, symmetry, and sexual dimorphism (Xu, Niu, & Li, 2016; Rhodes, 2006; Trujillo, Jankowitsch, & Langlois, 2014; Yang, Chen, Hu, Zheng, & Wang, 2015). Sexual dimorphism refers to the physical differences that gradually develop between mature men and women after puberty's secondary sexual characteristics, namely masculinization and feminization (Yang, He, & Liu, 2016). Men generally perceive more feminized female faces as more attractive (Komori, Kawamura, & Ishihara, 2009). Women's preferences for feminized versus masculinized male faces vary inconsistently across different periods and contexts (DeBruine, Jones, Smith, & Little, 2010; Lee & Zietsch, 2011; Little, DeBruine, & Jones, 2011), with no clear preference differences (Chen, Jiang, Ren, & Yuan, 2017).

Female body attractiveness indicators include breast and hip size, waist-to-hip ratio (WHR), and body mass index (BMI). Across different cultures, men's preferences for breast and hip size vary, but men generally perceive women with lower WHR as more attractive (Dixson, Grimshaw, Linklater, & Dixson, 2010; Garza, Heredia, & Cieslicka, 2016; Kościński, 2014), because WHR is an important indicator that reflects women's current reproductive value (potential for bearing offspring) (Jasińska, Ziomkiewicz, Ellison, Lipson, & Thune, 2004).

As an important criterion in mate selection, physical attractiveness enables highly attractive individuals to have higher relationship success rates than others (Rhodes, 2006; Rhodes et al., 2005). Extensive research has demonstrated that highly attractive individuals have more romantic partners (Jokela, 2009; Langlois et al., 2000; Rhodes et al., 2005) and attract many individuals inclined toward short-term relationships (Perilloux, Cloud, & Buss, 2013). Rhodes et al. (2005) found that men with more masculine bodies and faces and more average body types had more short-term partners (relationship duration less than one month), and men with more average body types had more extra-pair copulations (EPC) than their peers. Women with more feminized faces attracted more long-term partners (relationship duration greater than 12 months). Attractive men (body attractiveness) and women (facial attractiveness: feminization, symmetry) both initiated sexual activity earlier than their peers, and taller men and women had more short-term partners. Not only do highly attractive individuals have higher relationship success rates, but they also have more offspring. Jokela (2009) explored the relationship between facial attractiveness and reproductive success in 2,441 participants, finding that individuals with high facial attractiveness had more children. These results are supported not only by empirical research but also by biological evidence. Studies have shown that men's facial attractiveness positively predicts sperm quality (Soler et al., 2003), and women's estrogen levels positively correlate with their facial attractiveness level (feminized facial features) (Law Smith et al., 2006). For men, sperm quality and quantity ensure success in same-sex competition, guaranteeing reproductive success. For women, estrogen is closely related to fertility—women with higher estrogen have better reproductive capacity.

Individuals' physical features are closely linked to their mate value, with differences in physical features reflecting differences in mate value. Throughout evolutionary history, humans have developed preferences for specific physical features and tend to select mates possessing these features (Xu et al., 2016). These physical features represent external manifestations of high mate value. The preference for high physical attractiveness has evolved into a psychological mechanism and become an automated behavior. This internalized behavior enables individuals to accurately and quickly select higher-quality partners during mate selection, thereby increasing opportunities to pair with highly attractive individuals and expecting to ultimately obtain higher-quality offspring (Dongen, 2014).

1.2 Social Psychology Perspective

Due to gender differences in mate selection preferences, different social exchange strategies emerge in mate selection processes. High mate value individuals always attempt to maximize mating benefits by “displaying high physical attractiveness or abundant assets” to exchange for partners’ resources and find the best possible mate. In summary, high mate value women (i.e., highly attractive women) and high mate value men (i.e., men with status and resources) prefer partners with high mate value (Mathes & Kozak, 2008). Men’s “resources” are divided into two categories: good genes or good investment. Good genes assume men possess masculine traits, physical attractiveness, muscularity, symmetry, and intelligence (Cousins & Gangestad, 2007). Good investment assumes men have material resources or the potential to acquire them (Buss & Schmitt, 1993). Women select men with “high investment” traits as “good fathers” for long-term relationships and men with “high gene” traits as “good lovers” for short-term relationships (Cousins & Gangestad, 2007; Gangestad & Simpson, 2000).

In ideal mate selection scenarios, high mate value women expect to exchange their high physical attractiveness for more male resources (Buss & Shackelford, 2008), including good genes (physical attractiveness, muscularity, sexiness, health, and intelligence) (Cousins & Gangestad, 2007); good investment (social status, family background, ambition, education, ability, occupation) (Lu, Zhu, & Chang, 2015); good parenting (desire for family and children, liking children, emotional stability, maturity, gentleness, empathy); and good partnership (loyalty and devotion to partner, emotional stability and maturity). Highly attractive women have higher mate selection standards, expecting partners to be good fathers and lovers while also being physically attractive and having stable, substantial incomes. Individuals with high mate value, who are sought after by many, can better utilize their mate value to attract mates meeting their preferences (Conroy-Beam & Buss, 2016). During relationships, they tend to adopt partner-benefiting strategies to maintain the relationship, making partners perceive their value as higher and increasing relationship satisfaction (Salkicevic, Stanic, & Grabovac, 2014).

However, in real mate selection contexts, individuals must combine, weight, or compare their preferences in some manner before making actual partner choices (Conroy-Beam & Buss, 2016). Although individuals prefer mates with high mate value, they ultimately tend to form intimate relationships with partners of similar mate value. Yet seemingly mismatched couples still frequently occur in reality—for example, young, beautiful women pairing with less attractive but wealthy men (Mathes & Kozak, 2008). The phenomenon of “choosing the right one, not the ‘expensive’ one” often appears in social life. Although physical attractiveness and status/assets are important indicators of female and male mate value respectively, women also choose to pair with physically attractive men of average means (Chu, Hardaker, & Lycett, 2007). Men may not choose high facial attractiveness women but instead perceive women with similar mate value as more attractive and prefer to partner with them. These represent

matching in a broader sense—individuals measure other social factors based on their own mate value to exchange for corresponding resources (physical attractiveness or status/assets) to achieve a state where both parties' overall mate value is matched, thereby applying social exchange theory to partner selection. Actual mate selection requires weighing one's own situation and realistic factors before choosing an appropriate partner. If individuals fail to match their own attractiveness and abilities with their partner's overall profile, resulting in mate value discrepancies, conflicts arising from these discrepancies during relationship development may trigger a series of negative consequences.

2. When Beauty May Fail: Disadvantages of High Physical Attractiveness in Intimate Relationships

Dermer and Thiel (1975) proposed the “When beauty may fail” perspective, which contradicts the “What is beautiful is good” conclusion. Highly attractive individuals are perceived as more narcissistic, willful, cold, materialistic, and less willing to cooperate with others. In marital relationships, they are more likely to cheat and initiate divorce (Dermer & Thiel, 1975; Muñoz-Reyes, Pita, Arjona, Sanchez-Pages, & Turiegano, 2014; Shinada & Yamagishi, 2014). High facial attractiveness also affects how seriously people treat researchers' work, with highly attractive researchers perceived as producing lower-quality research than their less attractive counterparts (Gheorghiu, Callan, & Skylark, 2017). This indicates that highly attractive individuals do not only produce positive outcomes; this trait can also place them at a disadvantage in careers and intimate relationships.

In workplace contexts, although highly attractive individuals are welcomed, they also experience negative effects (Agthe, Spörrle, & Maner, 2011; Johnson, Podratz, Dipboye, & Gibbons, 2010; Luxen & Van De Vijver, 2006). Luxen and Van De Vijver (2006) found that when interviewers are women, high physical attractiveness (facial attractiveness) places female interviewees at a disadvantage. For example, high attractiveness triggers interpersonal derogation—when interviewers are same-sex, they attribute attractive interviewees' success to luck rather than ability (Försterling, Preikschas, & Agthe, 2007) and reduce social interactions with them (Agthe et al., 2010). Researchers attribute this to same-sex competition, which motivates individuals to make negative comments or engage in derogatory behavior toward same-sex individuals with high physical attractiveness (Agthe et al., 2010; Maner, Miller, Rouby, & Gailliot, 2009; Ruffle & Shtudiner, 2015).

Highly attractive individuals are perceived as desirable and suitable high-quality partners, yet their marriages are shorter-lived than others'. Ma-Kellams, Wang, and Cardiel (2017) selected 238 male photos (facial only) from high school yearbooks between 1977 and 1980 for attractiveness ratings, then obtained these men's marital status (married, divorced, unmarried) from an open database. The results showed that compared to men with low facial attractiveness, men with high facial attractiveness had shorter marriage durations—they were more

likely to divorce. Because high physical attractiveness implies “good genes,” individuals choose highly attractive partners to better transmit their own and their partner’s superior genes to the next generation. However, individuals pay less attention to the degree of fit between actual partners and ideal preferences after partner selection. Actual mate selection outcomes cannot completely align with ideal preferences, and behaviors and emotional states triggered by mate selection may lead to negative consequences. Particularly when individuals fail to weigh overall mate value between themselves and their partners, or when preferred traits do not produce expected positive outcomes, what happens then?

2.1 Mate Value Discrepancy

Although people prefer highly attractive partners, in reality they become involved with individuals of roughly equivalent attractiveness (Little, Burt, & Perrett, 2006). In romantic relationships, choosing similar partners facilitates relationship establishment and development (Zhang, Sun, & Zheng, 2015). Do dissimilar levels of physical attractiveness negatively affect relationship formation and development? Buss and Duntley (2011) predicted that mate value discrepancy is a link in the causal chain of intimate partner violence, particularly when women have higher mate value, which is more likely to trigger partner violence. First, individuals with higher mate value are more likely to be unfaithful (Buss, 2000). Second, they are more likely to “signal” to others, leading to relationship betrayal. Finally, if men have lower mate value, they struggle to provide abundant resources to their partners, which also increases the likelihood of partner infidelity or complete betrayal. The hypothesis suggests these variables are associated with increased violent behavior toward partners. Indeed, evidence shows that individuals with lower mate value display stronger control and aggression toward their partners (Graham-Kevan & Archer, 2009). These controlling and aggressive behaviors may be related to individuals’ “Dark Triad” personality traits. Lower mate value individuals engage in more mate retention behaviors, and the use of mate retention behaviors positively correlates with the Dark Triad (narcissism, Machiavellianism, psychopathy)—the more pronounced the Dark Triad traits, the more mate retention behaviors are employed (Jonason, Li, & Buss, 2010). Dark Triad traits are non-socially desirable and often correlate with violence and antisocial behavior (Furnham, Richards, & Paulhus, 2013; Pailing, Boon, & Egan, 2014). Individuals with these traits tend to select short-term relationships with less commitment, are more likely to “poach” others’ partners (Jonason et al., 2010), and can predict infidelity in current intimate relationships (Jones & Weiser, 2014). Among low mate value men, higher narcissism in the Dark Triad traits predicts more aggressive behavior toward same-sex competitors (Bird, Carre, Knack, & Arnocky, 2016).

Relationship satisfaction reflects the degree of pleasure and happiness individuals experience in intimate relationships and can objectively reflect current relationship quality. When individuals perceive their own mate value as higher, they believe their partner cannot easily replace them and adopt more benefit-

bestowing mate retention strategies. When they believe they can be easily replaced—that is, when their mate value is lower than their partner's—they adopt cost-inflicting mate retention strategies (Sela, Mogilski, Shackelford, Zeigler-Hill, & Fink, 2017). Benefit-bestowing mate retention strategies are used more by high mate value individuals, and greater use of these strategies leads to higher relationship satisfaction. Cost-inflicting mate retention strategies are used more by low mate value individuals, and higher frequency of these strategies leads to lower relationship satisfaction (Salkicevic et al., 2014). Low mate value individuals believe it is difficult to replace their current partner, so regardless of how many alternative options are available, they feel satisfied with the current relationship. However, high mate value individuals only feel satisfied when no more suitable alternatives are currently available (Conroy-Beam & Buss, 2016). In relationships with mate value discrepancies, although low mate value individuals believe their high mate value partner is not easily replaceable and thus experience higher relationship satisfaction, they themselves are in an easily replaceable position. To prevent their high mate value partner from being coveted or themselves from being replaced, and considering their limited resources, they adopt low-cost, cost-inflicting mate retention strategies or other aggressive, controlling violent behaviors. These behaviors are associated with negative personality traits, may harm the partner, place highly attractive individuals at a disadvantage in intimate relationships, reduce relationship satisfaction, and accelerate relationship dissolution.

2.2 Mate Retention Behaviors and Related Behaviors

When individuals perceive their physical attractiveness as lower than their partner's, they typically employ a series of mate retention behaviors to guard against their partner being coveted and “stolen,” preventing current relationship dissolution (Oltmanns, Markey, & French, 2016). For example, when a boyfriend places his arm around his partner in public, this behavior of declaring ownership to potential same-sex rivals is called mate retention behavior (Buss, Shackelford, & McKibbin, 2008). Mate retention behavior is a broad concept, and Buss et al. (2008) categorized the mate retention strategies people employ, which range from vigilance at the cognitive level to violent behavior at the behavioral level. Mate retention behaviors are further divided into two categories: inflicting costs and bestowing benefits (Buss et al., 2008; Miner, Starratt, & Shackelford, 2009). Low mate value men (low physical attractiveness, low material resources, difficult personality) are more inclined to use cost-inflicting behaviors toward their partners and less likely to choose benefit-bestowing mate retention behaviors compared to high mate value men (high physical attractiveness, substantial material resources, agreeable personality) (Miner et al., 2009). Low mate value men have fewer resources (money, time, etc.) and therefore avoid mate retention behaviors that require resource expenditure (buying expensive gifts for partners or praising them), instead opting for low-resource-cost behaviors (telling female friends: “She's not a good partner”).

When a partner is a young, beautiful woman—that is, someone with high mate value—men employ more mate retention strategies (Haselton & Gangestad, 2006). Because men realize their partner's physical attractiveness exceeds their own, they begin to worry about and suspect their partner's potential infidelity, fearing they will attract more attractive men. When men attempt to use mate retention strategies to keep their partner and prevent them from starting new relationships, it may trigger resistance from the partner. This resistance becomes particularly pronounced when women perceive their own attractiveness as higher than their partner's—they show reduced commitment, increased thoughts of breaking up, greater interest in other men, and increased flirting behavior (Fugère, Cousins, & Maclarn, 2015). At this point, the intimate relationship enters a vicious cycle: men employ a series of mate retention strategies attempting to maintain the relationship, while stressed women begin to resist these retention efforts.

Among the 19 mate retention strategies are jealousy induction (e.g., showing interest in other women to make the partner angry) and derogation of mate (e.g., making other men think the partner is not a good person), which are microcosms of jealousy and insulting behavior in intimate relationships. Additionally, some mate retention strategies significantly correlate with sexual coercion behavior (Buss et al., 2008). Individual mate retention strategies can effectively predict men's violence toward their partners (Shackelford, Goetz, Buss, Euler, & Hoier, 2005). Identifying such behaviors can help intervene in partner violence and assist women in effectively avoiding partner violence.

2.2.1 Jealousy Buunk (1997) divided jealousy in intimate relationships into reactive jealousy, possessive jealousy, and anxious jealousy. Reactive jealousy refers to the degree of negative emotion individuals experience after a partner's infidelity. Possessive jealousy refers to individuals' attempts to prevent their partner from interacting with other opposite-sex individuals. Anxious jealousy refers to the process of repeatedly imagining a partner's potential infidelity and experiencing negative emotions. When no actual infidelity occurs, jealousy as an adaptive mechanism is activated by predictive factors of infidelity, such as mate value discrepancy (Buss & Abrams, 2016). Highly attractive individuals may have more opposite-sex friends in their social circles, causing partners to experience more jealousy. Whether competitors are imagined or real, when a partner's physical attractiveness is higher, less attractive individuals experience more anxious jealousy and worry about their partner's potential infidelity (Swami et al., 2012). Highly attractive individuals are automatically processed as threats that may cause relationship dissolution (Ma, Zhao, Tu, & Zheng, 2015; Zhang, Maner, Xu, & Zhang, 2016). High physical attractiveness not only triggers partners' same-sex competition awareness but also arouses same-sex competition, generating jealousy. Individuals worry that highly attractive same-sex individuals will intervene in their intimate relationships, placing them in a state of chronic jealousy, enhancing their encoding and memory of highly attractive same-sex individuals, and leading them to make implicit negative eval-

uations (Agthe, Strobel, Spörrle, Pfundmair, Maner, 2017; Maner et al., 2009). High mate value (high physical attractiveness) individuals not only trigger others' jealousy but also exhibit stronger jealousy reactions themselves: men show stronger reactions to sexual jealousy, while women show stronger reactions to emotional jealousy (Edlund & Sagarin, 2014).

2.2.2 Insults When men perceive their mate value as lower than their partner's, their insulting behavior toward their partner increases, such as blaming the partner for everything, criticizing the partner's appearance, accusing the partner of wanting to have sex with other men, or claiming the partner is worthless (Maner et al., 2009). However, Starratt and Shackelford (2012) did not find this result in their research, as neither men's nor women's mate value predicted men's insulting behavior toward their partners. Gender differences may lead to opposite conclusions, as different-sex participants have varying sensitivity to and identification with their own and their partner's mate value. Men may be more sensitive to their partner's mate value and the partner's mate retention behaviors but less sensitive to their own mate value and the behaviors they employ. Summarily, however, men do use more mate retention behaviors in intimate relationships and directly insult highly attractive partners, which reduces women's self-esteem (Mckibbin et al., 2007).

2.2.3 Sexual Coercion Sexual coercion refers to the active party using soft tactics (e.g., deception, emotional manipulation) or hard tactics (e.g., physical violence, direct threats) to engage in sexual activity against the other party's will (He, 2012). Some research suggests that coercive sexual behavior within intimate relationships is an anti-cuckoldry strategy, referring to men in relationships who suspect their partner of infidelity and subsequently force sexual activity (Goetz & Shackelford, 2006). When individuals suspect partner infidelity, the more sexual coercion they employ, the more mate retention strategies they adopt (Goetz & Shackelford, 2009). Individuals threaten to end the intimate relationship while emotionally manipulating their partner to make them feel "obligated" to have sex, or they use violence to force sexual activity.

Because of their high physical attractiveness, individuals suffer from partner suspicion, which triggers partner jealousy and prompts mate retention or sexual coercion behaviors. Although these are adaptive behaviors to prevent partner infidelity, the increased suspicion and distrust cause serious physical and psychological harm to highly attractive individuals.

3. Beauty is a Double-Edged Sword

In cross-cultural contexts, men prioritize high physical attractiveness as the primary mate selection criterion in both long-term and short-term mating (Li, Valentine, & Patel, 2010). In daily life, men show preferences in judgment and recognition of high facial attractiveness women (Zhang et al., 2010), and in actual mate selection, men prefer high facial attractiveness women for intimate

relationships. But beauty is a double-edged sword: while high facial attractiveness women are favored by men, they are also subject to men's suspicion. High facial attractiveness women are often perceived as more open to short-term intimate relationships, attracting more opposite-sex individuals and thus increasing their chances of establishing relationships with high-quality partners (Fisher, Hahn, Debruine, & Jones, 2016). Although men prefer high facial attractiveness women when establishing intimate relationships, they fear these women will adopt dual-mating strategies during relationship development, because high facial attractiveness women are believed to benefit more from short-term mating strategies: they can better offset the potential costs of short-term relationships, such as low investment (reduced time for pregnancy and lactation).

3.1 Dual-Mating Theory

Buss and Shackelford (2008) proposed the dual-mating theory, which suggests that based on exchange theory, women may have evolved to select men with the best investment capacity as long-term partners while simultaneously selecting men with better genetic genes as short-term partners. Because most women cannot obtain both "good investment" and "good genes" from the same man, some women who expect future partners to possess both requirements adopt such measures. Research has proven that unlike low physical attractiveness women, high physical attractiveness women desire partners with both abundant resources and outstanding appearance. Little, Burt, Penton-Voak, and Perrett (2001) found that high physical attractiveness women (facial attractiveness) prefer more masculine and symmetrical male faces (high facial attractiveness), and women with low WHR (an indicator of high physical attractiveness) also prefer more masculine male faces (Pentonvoak et al., 2003). The core of the dual-mating hypothesis is that women closer to ovulation are more attracted to extra-pair men with high physical attractiveness. Women are considered most physically attractive when near ovulation (Welling & Puts, 2014), which is also the peak of female reproductive capacity. During this period, women prefer men with "good genes" traits (Chen & Zheng, 2015) and show more interest in masculine-faced men than usual (Ditzen, Palmfischbacher, Gossweiler, Stucky, & Ehlert, 2017). When long-term partners have low attractiveness, women closer to ovulation show more interest in sexual activity with extra-pair men (Pillsworth & Haselton, 2006). In summary, high physical attractiveness women are more likely to be attracted to high physical attractiveness men in intimate relationships and desire highly attractive partners.

Women's reproductive motivation derived from menstrual cycle changes is jointly affected by high estradiol and low progesterone (Gangestad & Haselton, 2015). The shift in preference for masculine faces positively correlates with women's estradiol changes (Roney & Simmons, 2008) and negatively correlates with progesterone changes (Jones et al., 2005). Gildersleeve, Haselton, and Fales (2014) verified through meta-analysis that women in the ovulatory phase prefer more masculine male faces. Wood, Kressel, Joshi, and Louie (2014) also used

meta-analysis to explore differences in preferences for masculine-faced traits between ovulatory and non-ovulatory women, but found no evidence that ovulatory women prefer more masculine faces. Because women's hormonal status has ambiguous and controversial effects on preferences for masculine facial features, and because most previous studies assessed women's hormonal levels through self-reported menstrual cycle status rather than accurate hormonal measurement, plus between-subject designs are susceptible to individual hormonal differences, these factors may cause inconsistent results. Therefore, Jones et al. (2018) conducted a longitudinal study investigating whether women's preferences for masculine facial features correlate with their own hormonal levels. The analysis showed no compelling evidence supporting the hypothesis that women's preferences for masculine facial features relate to changes in salivary hormone levels, thus challenging the core assumption of the dual-mating hypothesis. In reality, whether high physical attractiveness women tend to adopt dual-mating strategies requires more evidence.

3.2 Sperm Competition Theory

Sperm competition refers to competition among sperm from different men to fertilize the same egg cell (Baker, 2016). Extensive research has demonstrated the existence of sperm competition in humans (Dhole & Servedio, 2015; Van der Horst & Maree, 2014), which is an adaptive mechanism in both male physiology and psychology (Pham & Shackelford, 2014).

A partner's high physical attractiveness or the presence of potential rivals around the partner are considered cues that trigger sperm competition. The appearance of these cues prompts men to adopt sperm competition strategies, which often occur after men believe their partner has adopted a dual-mating strategy (Pham & Shackelford, 2014). Men believe high physical attractiveness women are more likely to cheat, and younger, more beautiful women in high reproductive value periods place their male partners at high risk for sperm competition. Partner infidelity or suspicion of infidelity triggers sperm competition behavior because partner unfaithfulness threatens male reproductive success, increases the possibility of men being cuckolded, and leads men to unknowingly invest resources in raising another man's offspring.

Women's physical attractiveness level can effectively predict men's anti-cuckoldry behaviors, including increased mate retention behaviors, increased sexual frequency with partners, and shortened sexual duration (Barbaro, Pham, & Shackelford, 2015; Kaighobadi & Shackelford, 2008). Frequent sexual activity, as one sperm competition strategy, aims to reduce sperm competition risk and compete with other potential or existing sperm, with multiple sexual encounters ensuring fertilization success (Pham et al., 2014). Sperm competition theory aptly explains the mechanism of sexual coercion behavior (He & Tsang, 2017): men force partners to have sex, increasing the probability of sperm entering the partner's reproductive tract to compete with other potential sperm, thereby enhancing their own reproductive success

(Barbaro et al., 2015). Research suggests that if men invest most resources in same-sex competition and attracting mates, leading to high circulating androgens, they will have fewer resources to produce high-quality sperm (Soler et al., 2015). Although using sperm competition strategies can increase the probability of sperm-egg combination, it also reduces sperm quality.

The series of relationship maintenance strategies used to prevent highly attractive partners from cheating and causing relationship dissolution are not inherently important; what matters is whether these strategies can effectively prevent partner infidelity while increasing both partners' relationship satisfaction and stabilizing long-term relationship development. Both the dual-mating strategy adopted by high physical attractiveness women who cheat and the sperm competition methods used by men to prevent cheating are evolutionarily formed adaptive behaviors. Researchers believe "existence implies suitability," but whether this suitability substantiates female infidelity or effectively prevents it requires more evidence.

3.3 Mate Switching Theory

Engaging in extramarital affairs, emotional detachment, cultivating backup partners, terminating current relationships, and starting over are all individual mate switching strategies. Although breakups, divorces, or affairs are often labeled as "failures" at the moral level, the specific cognitive and behavioral strategies generated by mate switching can successfully solve the adaptive problem of moving from one mate to another. Buss, Goetz, Duntley, Asao, and Conroy-Beam (2017) termed the phenomenon of breaking up with a current partner and establishing an intimate relationship with another partner as mate switching, which more accurately describes a common or primary human mating strategy. Mate switching is a complex psychological mechanism designed to abandon existing mates and acquire new ones, primarily used in three situations: (1) unexpected costs caused by the mate, or "relationship load"; (2) changes in either party's mate value, creating previously nonexistent discrepancies; and (3) the appearance of a new, interested potential partner whose mate value exceeds the current partner's value enough to offset breakup costs. Mate switching often occurs when mate value discrepancies form or when individuals are dissatisfied with their partner's mate value. However, mate value assessment is not a static snapshot at a single time point; any dimension of mate value—such as attractiveness, reliability, status, resources, and emotional stability—may change at any time and requires long-term tracking assessment, a need that does not cease after mate selection. In summary, long-term monitoring of one's own and one's partner's mate value, maintaining balanced mate value between both parties or ensuring the partner is satisfied with one's own mate value, can more effectively prevent partners from adopting mate switching strategies.

4. Problems and Prospects

From an evolutionary psychology perspective, partner selection as an adaptive problem has repeatedly emerged throughout history, and individuals' physical attractiveness preferences as human adaptations have effectively solved this problem. Before relationship establishment, given that high physical attractiveness represents health, fertility, and other positive traits, people prefer to select highly attractive opposite-sex partners. However, this preference must consider one's own physical attractiveness level and other components of mate value. During relationship development after successful establishment, the series of negative impacts triggered by mismatched physical attractiveness or mate value discrepancies are factors not initially considered during mate selection. High physical attractiveness effectively promotes relationship establishment but also accelerates relationship dissolution—truly “success and failure stem from the same source.” Individuals prefer to partner with highly attractive individuals, and this “appreciation for beauty” is understandable. However, matching overall mate value during initial mate selection is crucial for future relationship development. Correctly understanding the role of high physical attractiveness in intimate relationships based on actual mate value matching can effectively improve relationship quality. When physical attractiveness is mismatched, ensuring overall mate value matching and actively communicating to resolve conflicts caused by attractiveness differences is essential. Conflicts originate from distrust and suspicion of highly attractive individuals; if positive mate retention strategies are used, they can increase the perceived mate value of the highly attractive partner in their eyes, thereby more effectively resolving conflicts.

First, research should examine the effectiveness of mate retention, sperm competition, and sexual coercion behaviors. Mate retention behavior, sperm competition theory, and sexual coercion are all adaptive behaviors, but their effectiveness deserves deeper exploration. Existing attractiveness matching theory and empirical research show that attractiveness-matched relationships can be more durable (Taylor, Fiore, Mendelsohn, & Cheshire, 2011). Therefore, whether the series of behaviors triggered by mismatched physical attractiveness can ultimately achieve the actor's original purpose requires investigation. Cost-inflicting mate retention behaviors used to prevent partners from leaving are considered high-risk and may increase relationship dissolution risk, contrary to users' original intentions. Although mate retention behaviors may reduce partner infidelity, previous research has not addressed their effectiveness. Questions about users' and partners' recognition of mate retention behaviors, whether expected effects are achieved, and which mate retention measures more effectively retain partners require future research.

Second, research should verify the accuracy of “good genes” in high facial attractiveness men. The phenotype-linked fertility hypothesis (PLFH) suggests that men's secondary sexual characteristics can accurately reflect their fertility. Men with more masculine facial features are believed to have “good genes” representing better fertility and can better transmit “good genes” to offspring. Men

with these features are considered more attractive, and higher facial attractiveness predicts better sperm quality (Foo, Simmons, & Rhodes, 2017; Soler et al., 2003). However, some studies found an inverse relationship between male facial attractiveness and sperm quality (Soler et al., 2015). These studies used male facial width-to-height ratio as a measure of facial attractiveness and testosterone concentration, finding that more masculine-faced men (wider faces) had poorer sperm quality than more feminine-faced men. Male facial width-to-height ratio is considered one of the sexually dimorphic features of male faces and a reliable external indicator of testosterone concentration. However, more research does not support facial width-to-height ratio as a sexually dimorphic feature, and no direct evidence proves an association between male facial width-to-height ratio and testosterone levels (Zheng, Yu, Liao, & Liu, 2017). Thus, it cannot support the hypothesis of an inverse relationship between high facial attractiveness and sperm quality, and relevant direct evidence needs further consolidation.

Third, research should examine differences in physical attractiveness preferences across social roles and ages. The preference for high physical attractiveness is innate, with studies finding that infants show greater preference for high physical attractiveness (facial attractiveness) individuals from early development (Griffey & Little, 2014). Fugère, Cousins, and Maclaren (2017) compared daughters and their mothers regarding the importance placed on physical attractiveness in daughters' future partners, finding that daughters placed more importance on partner physical attractiveness. Whether this result changes with age or differs due to pre-marital and post-marital social role transitions requires further investigation. In partner selection, men pay more attention to women's physical attractiveness, while women focus more on men's social status and material resources. Whether individuals' preferences for physical attractiveness change over time and with social and family roles needs further exploration.

Fourth, most current research on physical attractiveness is conducted in Western contexts. Given China's distinctive cultural characteristics and customs, whether Western research results show cross-cultural consistency in Chinese culture is worth investigating. Because the egg formation cycle, pregnancy, and lactation consume much of women's time, their reproductive capacity is far lower than men's. Influenced by many factors, women invest more resources and bear greater risks in intimate relationships (Buss, 2017). Given Chinese women's economic status in the family and societal expectations, Chinese women may invest more in their families. In summary, it is necessary to investigate differences between Chinese women and the current state of foreign research regarding sexual behavior with extra-pair men.

Dion believed that one mechanism producing the "what is beautiful is good" stereotype is that individuals shape their personality traits according to cultural stereotypes about beauty. In daily life, people tend to believe highly attractive individuals possess more socially desirable traits. When highly attractive individuals continuously perceive others' cognitions, it affects their self-conception, gradually believing they should possess such personality traits. Ultimately,

highly attractive individuals gradually develop into what people hope for under others' expectations. People believe highly attractive individuals have ideal social traits, but compared to this, they believe low-attractiveness individuals have lower social competence, less altruistic behavior, and are less intelligent. That is, people's agreement with "ugly is bad" is higher than with "beautiful is good" (Griffin & Langlois, 2006). Segal-Caspi, Roccas, and Sagiv (2012) found no differences in self-reported traits between high and low physical attractiveness individuals; differences lie in different values. Compared to low-attractiveness individuals, high-attractiveness individuals' behaviors follow importance rather than personal preference, conforming to socially important behavioral norms while engaging in more self-improvement behaviors to meet social expectations for highly attractive individuals. Whether intimate relationships produce different results due to "what is beautiful is good" or "when beauty may fail" ultimately depends on individuals' different values and what they consider most important. Moreover, whether both parties' physical attractiveness matches is not the most important factor; what matters most is whether this matching can promote both partners' relationship satisfaction and stable long-term relationship development. Simultaneously, whether the series of adaptive behaviors partners adopt due to physical attractiveness mismatches can effectively prevent relationship dissolution and promote post-behavior relationship satisfaction is also a question partners need to consider before acting.

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