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Again and Again: An Evolutionary Perspective on Aggression and Repair Intentions after Serial Sexual Infidelity

Aocheng Chen[1], Meishen Duan[2*], Yuchen Wang[3], Yuanxin Zhang[4], Xiaoxi Zhang[5]

[1]Chongqing Bachuan Quantum Middle School, Chongqing, China
[2]Department of Psychology, University of British Columbia, Vancouver, Canada
[3]Walnut Hill School For The Arts, Boston, America
[4]AISSU(Shenzhen), Shenzhen, China
[5]Chongqing Depu Foreign Language School, Chongqing, China
**Corresponding Author. Email:dms20061027@163.com*

Abstract. Sexual infidelity poses a significant risk to relational stability, often eliciting intense emotional and behavioural reactions in men. The present study examines the trajectories of male aggression and relationship-repair motivation in the context of recurrent sexual infidelity. Informed by evolutionary psychological theories, the study posits that male reactions signify evolving welfare trade-offs, whereby aggression and intentions for reconciliation are initially heightened after a first betrayal but gradually diminish as the frequency of transgressions escalates. A longitudinal online survey will target 600 men currently in established heterosexual relationships, employing standardized hypothetical scenarios and validated psychological assessments to capture changes across repeated infidelity events. It is expected that emotional exhaustion, lowered self-efficacy, and adjusted cost-benefit assessments will lead to decreased aggression and a waning willingness to reconcile over time. Moreover, Machiavellianism is examined as a possible moderator, with the hypothesis that individuals displaying elevated levels of this trait may engage in both aggressive and reparative behaviours as means of interpersonal control rather than relational restoration. By delineating these psychological dynamics, the study aims to augment theoretical comprehension of male reactions to betrayal and to guide clinical strategies designed to assist couples facing recurrent breaches of trust.

Keywords: sexual infidelity, aggression, evolutionary psychology, paternal uncertainty, WTR theory, Machiavellianism

1. Introduction

Sexual infidelity is one of the most psychologically destabilizing violations of trust in romantic relationships. It frequently evokes intense emotional responses among men due to evolved concerns regarding paternal certainty, sexual exclusivity, and resource investment [1]. Previous research indicates that men report greater distress following sexual infidelity compared to emotional infidelity [2]. Globally, approximately 30% of women aged 15 and older have experienced physical or sexual violence by an intimate partner, with a substantial proportion of incidents associated with

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infidelity or romantic jealousy [3]. In this paper, we aim to examine men's behavioral and emotional responses to sexual infidelity through an evolutionary lens, emphasizing adaptive strategies and associated psychological mechanisms.

2. Argument

Aggression stemming from a partner's sexual infidelity is often rooted in intense feelings of betrayal—a visceral response to the violation of trust that forms the foundation of intimate relationships. Sexual infidelity is uniquely disruptive because it challenges not only emotional intimacy but also fundamental assumptions of loyalty, reproductive certainty, and personal worth. When one partner uncovers an act of sexual betrayal, the sudden confrontation with this breach can elicit overwhelming emotional reactions—such as anger, humiliation, grief, and disorientation—that may manifest in verbal or physical aggression [4]. Contrary to simplistic notions of hostility, such behavior often represents a desperate attempt to re-establish psychological control and relational balance following destabilization [5]. Anger, in this context, serves as more than just an emotional release; it is a signal of deeper relational fractures and an evolved communicative function. It allows the betrayed partner to assert emotional boundaries, protest the violation, and attempt to engage in confrontational communication. Thus, anger can function as a strategic form of social signaling—expressing injury while simultaneously demanding acknowledgment and accountability [6]. From a psychological standpoint, this aggressive response is shaped by underlying beliefs about self-efficacy and illusion of control, particularly in early betrayal scenarios, where individuals may still believe they can change the situation and repair the damage. The betrayed individual's motivation to save the relationship may paradoxically fuel their aggression, as they seek to prevent further relational erosion. From an evolutionary perspective, this interaction between aggression and the desire to repair reflects deeper mechanisms tied to mate retention, reproductive interests, and ancestral fitness challenges.

According to Welfare Trade-Off Ratio (WTR) theory, individuals experience anger when they perceive that another person places insufficient weight on their welfare relative to their own—when the perceived WTR falls below an acceptable threshold [7]. In the context of romantic relationships, sexual infidelity directly implies a lowered WTR: the unfaithful partner appears to prioritize someone else's welfare, status, or pleasure over their long-term partner's reproductive and emotional investment. For men, this perceived imbalance triggers an acute psychological threat rooted in evolutionary history. Because internal fertilization occurs within women's bodies, men have evolved to be particularly vigilant to cues of sexual infidelity, since such cues signal potential misallocation of paternal investment toward genetically unrelated offspring [8]. Aggression, in this light, may be an adaptive strategy designed to deter partner defection, reclaim mate value, and impose costs on rivals or unfaithful partners [9]. Neuroendocrine shifts, such as increased testosterone, further support mate-guarding and confrontation responses [10]. Early discoveries of infidelity are especially potent in activating these mechanisms, as they represent a direct challenge to paternity certainty and relationship stability. These initial outbursts may serve multiple evolutionary functions: to reassert dominance over competitors, to warn the partner against future betrayal, and to initiate negotiations for relationship restoration.

However, evolutionary psychology also acknowledges the adaptive flexibility of emotional strategies. As incidents of infidelity recur, the betrayed partner's responses often shift in both form and intensity. While early reactions may be impulsive and emotionally amplified, later responses typically become more selective and calculated, guided by cost–benefit evaluations of continued investment. Some men may escalate controlling behaviors—monitoring their partner's whereabouts,

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engaging in social surveillance, or using emotional coercion [11]. Others may become emotionally detached and eventually dissolve the relationship when long-term reproductive or emotional returns are deemed insufficient [11]. This transition from aggressive defense to emotional withdrawal reflects a re-evaluation of mate value and reproductive cost. Additionally, repeated betrayal can lead to emotional exhaustion and depressive symptoms, reducing the likelihood that aggression remains a functional strategy [12]. Therefore, aggression and willingness to repair are not static traits but dynamic responses shaped by past experiences, emotional resilience, and perceived relational prospects.

This theoretical framework forms the basis of our current study, which aims to empirically examine how men's levels of aggression and willingness to repair fluctuate in response to serial incidents of sexual infidelity. We hypothesize that while initial betrayals elicit high levels of both aggression and repair motivation, these tendencies will diminish with each subsequent betrayal. As infidelity becomes a repeated offense rather than an isolated rupture, men are expected to show reduced emotional reactivity and decreased motivation to invest further in a deteriorating relationship. The results of such an investigation could hold important implications for both evolutionary psychology and clinical practice, offering therapists deeper insight into how betrayal dynamics shape male emotional regulation, relationship decision-making, and the development of tailored interventions for couples navigating repeated breaches of trust.

3. Methodology

To address the proposed predictions, we plan to use a questionnaire to gather empirical data. Prior to participation, all volunteers will be given the informed consent form. Inside the form, they will be told the aim of the study-investigating people's emotions and thoughts within specific interpersonal contexts and other matters needing attention.

At the beginning of the questionnaire, participants will complete the MACH-IV scale [13] to assess individual levels of Machiavellianism. Next, a set of seven questions (see Appendix 1) will gather demographic information, assess levels of interpersonal trust between partners, evaluate their willingness to initiate relationship repair, and measure the likelihood of aggressive behavior in response to two hypothetical infidelity scenarios.

We plan to post the questionnaire online through a professional survey platform. By using their panel services or paid promotion features, we can quickly contact the sample we want. The target population consists of 600 males currently in stable romantic relationships, stratified by age group. Each of them will be asked to complete the same questionnaire once every two months over a period of two years. This longitudinal design increases the potential for capturing real-life experiences of infidelity, which in turn may enhance the ecological validity of the findings. Due to the reason that infidelity is quite sensitive and some people may feel shame, a randomized response technique will be implemented. Participants will be randomly assigned an identification number between 1 to 6. Among 600 males, 100 males will be assigned numbers 1 through 5, with each number corresponding to 20 males. These participants will be instructed to consistently select the number they were assigned when answering each question, regardless of their true experiences or opinions. The remaining 500 males, assigned the number 6, will be instructed to respond truthfully based on their actual feelings and experience (answer from 1 to 5). This approach is intended to preserve respondent anonymity while simultaneously allowing for the analysis of authentic data from a substantial sample.

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4. Discussion

This study aims to examine whether men who exhibit a greater willingness to repair the relationship following a partner's sexual infidelity also display higher levels of aggression and how this relationship is moderated by the frequency of infidelity. Initial responses are expected to be characterized by elevated emotional arousal and aggressive behaviors, functioning as evolved mate-retention strategies intended to deter further infidelity and protect reproductive investment [9]. In early instances, men may perceive the betrayal as reparable, motivated by self-efficacy and an illusion of control, which intensify efforts to restore relational stability—even through aggression [14,15]. However, we hypothesize that willingness to repair diminishes as infidelity recurs. Repeated transgressions exacerbate emotional distress and undermine the belief that the behavior was isolated, reducing the perceived viability of reconciliation [16]. As infidelity becomes construed as intentional, expectations for behavioral change decrease, diminishing investment in relational repair. If supported by empirical findings, this study would offer a novel contribution to evolutionary psychology and clinical practice by linking male aggression theories with patterns of repair motivation in the context of serial infidelity. The results may inform therapeutic approaches by highlighting the role of unmet relational needs and supporting the use of non-violent communication strategies. Additionally, the findings could guide the development of targeted interventions tailored to individual clients. Ultimately, the study aims to enhance both theoretical understanding and therapeutic outcomes for individuals affected by betrayal.

A competing hypothesis suggests that even if the willingness to repair diminishes over time, aggression levels may remain high or even escalate. According to anger-focused intervention perspectives, anger may reflect a maladaptive or dysregulated response rather than an evolved strategy [17,18]. In this framework, repeated infidelity may accumulate emotional distress rather than desensitize the individual, potentially amplifying aggressive responses. Cumulative betrayals may fuel emotional overload, intensifying aggressive impulses rather than extinguishing them. These contrasting predictions emphasize the need to disentangle instrumental aggression from emotional reactivity.

A further possible finding we hypothesize is that willingness to repair the relationship may remain unexpectedly high despite repeated betrayal. In such cases, the personality construct of Machiavellianism may provide a compelling explanation for this persistence. Men high in Machiavellian tendencies often adopt calculated, goal-oriented interpersonal strategies designed to maximize personal advantage while minimizing emotional vulnerability [19-22]. Their continued attempts to "change" their partner's behavior are not rooted in hope for genuine reconciliation or restored intimacy; rather, they represent a deliberate effort to preserve dominance, control, and beneficial relationship structures [19]. Maintaining the relationship under these conditions may function as an avenue for securing instrumental rewards—such as resource accessibility, favorable social reputation, and psychological leverage—rather than supporting emotional connection or mutual trust [20].

Aggressive responses in this context can therefore manifest as intentional, coercive control tactics aimed at regulating a partner's behavior and deterring further violations [21]. Instead of serving as affective expressions of hurt, such aggression is strategically deployed to maintain authority and influence decision-making within the relationship [22]. High-Machiavellian individuals are also characterized by emotional detachment and pragmatic decision-making, meaning that their continued investment persists only as long as manipulation remains viable and personally advantageous. Thus, as infidelity escalates and the effectiveness of dominance-based strategies

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declines, both aggression and willingness to repair the relationship are likely to diminish as well—reflecting a cost–benefit reassessment of continued involvement.

Machiavellianism is therefore closely tied to the strategic use of aggression as a mechanism for maintaining interpersonal power. In early stages of betrayal, heightened aggression may function as a corrective tactic aimed at reasserting control and discouraging further infidelity. Over time, however, as repeated instances undermine the perceived utility of manipulation, both aggressive responses and the willingness to repair the relationship are likely to decline. This shift illustrates a strategic recalibration in which the high-Machiavellian individual disengages once the relational context no longer offers sufficient opportunities for dominance or personal gain. Consequently, Machiavellianism emerges as a significant predictor of how control-oriented strategies fluctuate across the course of repeated sexual infidelity, reflecting dynamic adjustments in aggression and relational investment based on changing costs and benefits.

5. Conclusion

This study offers a deeper look at how male aggression and repair intentions shift across repeated infidelity events. We argue that initial betrayals evoke both high aggression and repair motivation, but these responses decline as betrayal becomes recurrent and emotionally exhausting. For some men, particularly those high in Machiavellianism, aggressive responses may persist—not out of emotional pain but as a means of control. Our findings advance evolutionary theory by linking emotional regulation with adaptive mate-retention strategies. Clinically, the study provides therapists with practical insights into emotional triggers, highlighting the importance of personality traits, unmet needs, and communication patterns. These insights may support the design of targeted interventions, promoting better understanding and healing for couples facing serial betrayal.

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Appendix

Relationship Measures

1. How much do you trust your partner? (1–5 scale: Trustworthiness)
1 = Not at all trustworthy
2 = Slightly trustworthy
3 = Moderately trustworthy
4 = Mostly trustworthy
5 = Completely trustworthy
2. How affectionate is your partner toward you? (1–5 scale: Perceived affection)
1 = Not affectionate at all
2 = Slightly affectionate
3 = Moderately affectionate
4 = Mostly affectionate
5 = Very affectionate

Infidelity response scales

3. If your partner cheated once, how likely are you to reconsider the relationship?

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4. If your partner cheated multiple times, how likely are you to reconsider the relationship?

(1–5 scale: Willingness to reconsider)

1 = Will not reconsider

2 = Unlikely to reconsider

3 = Neutral / Unsure

4 = Likely to reconsider

5 = Very likely to reconsider

5. If your partner cheated once, how likely are you to respond with aggressive behavior (e.g., yelling, slapping, or violent urges)?

6. If your partner cheated multiple times, how likely are you to respond with aggressive behavior (e.g., yelling, slapping, or violent urges)?

(1–5 scale: Likelihood of aggressive behavior)

1 = Will not have aggressive behavior

2 = Unlikely to have aggressive behavior

3 = Moderately likely to have aggressive behavior

4 = Likely to have aggressive behavior

5 = Very likely to have aggressive behavior