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Commentary Proposal for:

A Formula for Love: Partner Merit and Appreciation Beget Actor Significance

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Love in Motion: Integrating Temporal and Interactional Dynamics into the Formula of Love

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Love in Motion: Bringing Temporal and Interpersonal Dynamics into the Formula of Love

Abstract

Love emerges through interpersonal exchanges that evolve over time. A comprehensive account of love should reflect this dynamic nature and encompass its temporal and interpersonal aspects. As such, we propose integrating these dynamics into the target article's framework to better align with relationship science and more accurately capture how romantic relationships develop, persist, and change across time and interaction.

Main Text

The *Formula of Love* provides a valuable and detailed account of how individuals fall in and out of love, emphasizing the partner's meritorious qualities, the appreciation they provide, and our intrinsic need to feel that we matter. According to the theory, love diminishes when either the partner's merit or their appreciation declines (as articulated in Hypothesis 8 of the target article). While this offers a useful starting point, the proposition reflects a predominantly static and simplified view of love, overlooking its inherently dynamic and multifaceted nature. It seems to suggest that each of the components –partner qualities, appreciation and our significance quest- remains equally important across interactions and the course of a relationship. Moreover, the model only explicitly acknowledges interpersonal processes in the appreciation component, although such dynamics arguably influence all components.

We propose extending the target article by explicitly integrating the dynamic qualities of romantic relationships, which currently receive limited attention. By "dynamic," we refer to two core elements: (1) temporal processes, and (2) interpersonal processes.

Regarding temporal processes, romantic relationships evolve over time, from the first encounter to the point at which they end (Eastwick et al., 2019). The target article, however, primarily emphasizes components relevant to initial attraction and early-stage relationship development. As relationships progress, different components and relational dynamics become increasingly important—yet these later-stage developments receive little attention in the current framework.

Incorporating findings from relationship science on temporal development would refine and enrich the framework. For instance, in early stages, passionate love—marked by longing, excitement, and uncertainty—plays a central role (Carswell & Impett, 2021; Hatfield & Walster, 1985; Sprecher & Regan, 1998). Features such as physical attraction and ambiguity enhance perceived partner merit and increase attraction, but these same features tend to lose relevance—or even negatively predict—relationship satisfaction in more established partnerships (Imai et al., 2023; McNulty et al., 2008; Whitchurch et al., 2011). Sexual desire, another merit-related factor, is highly salient at the beginning of a relationship but its role tends to decline over time (Birnbaum & Finkel, 2015).

As relationships progress, emotional bonds deepen and interdependence grows, and commitment, trust, and investment become key to relationship maintenance and satisfaction (e.g., Arriaga & Agnew, 2001; Hazan & Shaver, 1987; Sternberg, 1986). In other words, the relative weight of the Formula's components shifts: while partner merit may drive early

attraction, appreciation—and the interpersonal processes that support it—becomes increasingly central to sustaining love over time. Explicitly incorporating such temporal shifts in the framework would capture love in a more comprehensive, natural way.

Beyond changes over time, love is fundamentally shaped by what happens *between* partners. Interpersonal dynamics—how individuals interact with and respond to one another—play a crucial role in shaping feelings of love, yet they are underrepresented in the current framework of the target article.

As appreciation grows in significance over time, it likely becomes more malleable and responsive to the relational context. Increased investment and interdependence heighten motivation to preserve the relationship, which can lead to more favorable and biased perceptions of a partner (Lemay & Clark, 2015). For instance, when partners fall short, individuals often adjust their standards to their partner rather than experience a decline in satisfaction (Gerlach et al., 2017). They may prioritize traits their partner already possesses (Fletcher et al., 2000) or project their own supportive behaviors onto their partner (Lemay Jr. & Clark, 2008). These motivated processes illustrate how interpersonal dynamics shape the perceived meaning and salience of both partner merit and appreciation—challenging the model's assumption that love simply fades when these components decline.

Even in early stages, interpersonal effects override static assessments of partner merit. Empirical evidence shows that relationship-specific effects often outweigh general partner characteristics in predicting initial attraction (Eastwick et al., 2019; Joel et al., 2017b; Luo & Zhang, 2009). Ideal partner preferences fail to reliably predict partner choice once people begin to interact (Eastwick & Finkel, 2008; Joel et al., 2017b), and the predictive power of perceived partner merit disappears in real-life encounters (Eastwick et al., 2011). Instead, partner evaluations become increasingly relationship-specific (Eastwick & Hunt, 2014), further illustrating that love is constructed through ongoing interpersonal dynamics.

In conclusion, incorporating both temporal and interpersonal dynamics into the *Formula of Love* would yield a more comprehensive and psychologically realistic account of how love develops, persists, and sometimes fades. This integration would not only align the theory more closely with empirical evidence from relationship science but also enhance its ability to account for the dynamic, evolving nature of romantic relationships.

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