

What fuels passion? An integrative review of competing theories of romantic passion

Kathleen L. Carswell¹  | Emily A. Impett² 

¹Department of Psychology, Durham University, Durham, UK

²Department of Psychology, University of Toronto Mississauga, Mississauga, Ontario, Canada

Correspondence

Kathleen L. Carswell, Department of Psychology, Durham University, Upper Mountjoy, South Rd, Durham DH1 3LE, UK.
Email: kathleen.carswell@durham.ac.uk

Abstract

In an integrative review, we examine four theories and models of romantic passion to determine what causes feelings of romantic passion. Although a growing consensus has emerged for the definition of romantic passion, we suggest that this is largely not the case for the source of romantic passion. We outline how four different perspectives—Limerence Theory, the Rate of Change in Intimacy Model, the Self-Expansion Model, and the Triangular Theory of Love—propose four different potential sources of romantic passion and review empirical support in favor and against each. For each of these perspectives, we additionally outline the predicted trajectory of passion that follows from each theorized source of passion, as well as each perspective's view on the ability for passion to be controlled and up-regulated. In identifying ways in which these theories and models offer conflicting predictions about the source of romantic passion, this review points to ways in which a more comprehensive model may be developed that integrates across these four perspectives.

1 | INTRODUCTION

Popular culture paints an image of romantic passion as a mysterious and uncontrollable desire that ignites instantly between unwitting victims. Struck by cupid's arrow, the prince is overcome by the beauty of a princess; the romantic comedy heroine helplessly succumbs to her irrepressible attraction for the insufferable, but strangely

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. Social and Personality Psychology Compass published by John Wiley & Sons Ltd.

appealing male lead; and on the flip side, the reality dating show star laments that “there just wasn’t that spark.” Research over the past several decades has begun to converge on a definition of romantic passion, however, a consensus has yet to emerge on what ultimately fuels and snuffs out such illusive passionate feelings. To help illuminate how passion develops, dissipates, and how it might be revived, we review four different theories and models of romantic passion from relationship science to better understand the source of this sought-after, but hard-to-attain state (Carswell & Finkel, 2018; Carswell et al., 2019; Hatfield & Rapson, 2006; Simpson et al., 1986). Given that these models and theories have largely been proposed and investigated independently, we aim to highlight how these different perspectives diverge in their predictions and might be better integrated into a more comprehensive model of romantic passion.

2 | WHAT IS ROMANTIC PASSION?

The most common definition of romantic passion (also referred to as passionate love) is “an intense longing for union with the other” (Hatfield & Walster, 1978, p. 9). It is an intense psychological state often characterized by powerful emotions—elation or ecstasy when feelings are reciprocated, and anxiety or despair when feelings are unreciprocated—as well as a sense of strong motivational wanting of another, sometimes to the point of obsession (Aron et al., 2005; Graham, 2011; Hatfield & Walster, 1978; Sternberg, 1986; Tennov, 1979). The most widely used measure of passion, the Passionate Love Scale (Hatfield & Sprecher, 1986), delineates cognitive (e.g., “intrusive thinking or preoccupation with the partner”), affective (e.g., “attraction to the partner, especially sexual attraction”) and behavioral components (e.g., “maintaining physical closeness”). Tennov (1979) similarly describes a particularly intense form of romantic passion, coined “limerence,” which includes motivational and affective properties of romantic yearning and a desire for one’s romantic feelings to be reciprocated. For instance, among the basic components of limerence are intrusive thinking about the other, longing for romantic reciprocation, an aching in the center of the chest when reciprocation is uncertain, a feeling of buoyancy or elation when reciprocation is achieved, and an inability to feel limerent for more than one person at a time.

Romantic passion differs from other affect-laden aspects of relationship quality such as intimacy. Whereas intimacy represents feelings of closeness and connection with another person, romantic passion is a motivational desire for such intimacy. In support of this motivational aspect of romantic passion, neuroimaging studies have demonstrated that romantic passion is associated with activation in brain regions associated with motivation and addiction (Acevedo et al., 2011; Aron et al., 2005; Bartels & Zeki, 2000; Fisher et al., 2002, 2005, 2016). The Passionate Love Scale also generally factors separately from assessments of closeness, intimacy, and companionate or friendship-based love in psychometric examinations (Aron & Westbay, 1996; Fehr, 1994; Hendrick & Hendrick, 1989; Sprecher & Regan, 1998). Indeed, in the extensive history of attempts to define the word “love” and its different forms (see Hatfield et al., 2012 and Reis & Aron, 2008 for reviews), scholars have long sought to distinguish between passionate (or more romantic) forms of love and companionate (or friendship-based) love. For example, in the Triangular Theory of Love, passionate love (which Sternberg, 1986 terms “infatuation”) consists of passion, but does not necessarily promise intimacy or commitment, whereas companionate love offers intimacy and commitment, but not passion (Hatfield et al., 2012; Sternberg, 1986).

Although romantic passion is primarily conceived of as a longing for union with a romantic partner in the sense of a desire for emotional union or intimacy, it also often includes a desire for sexual union. Although sexual desire is strongly correlated with romantic passion, particularly in modern, Western cultures (see Hatfield et al., 2012 for a review), it is not necessary or sufficient to feel sexual desire to experience passion. Sexual desire on its own, for example, is more closely tied to gonadal estrogens and androgens, whereas romantic passion is more closely tied to the “reward” or dopaminergic system of the brain (Aron et al., 2005; Bartels & Zeki, 2000; Diamond, 2003, 2004; Fisher, 1998). Individuals can feel sexual desire for individuals with whom they do not passionately love (Meyers & Berscheid, 1997). Less commonly, individuals may also experience feelings of

romantic passion for an individual in the absence of sexual desire (Tennov, 1979). This is often the case among children prior to puberty (Hatfield et al., 1988) and individuals who are romantically asexual (i.e., individuals who report experiencing romantic attraction, but not sexual attraction; Bulmer & Izuma, 2018). Thus, although sexual desire is a strong correlate of romantic passion, particularly in established relationships, it represents just one component of romantic passion.

Passionate love is experienced with similar frequency and intensity across cultures; however, it is not equally valued (see Hatfield & Rapson, 2006 and Hatfield et al., 2007, 2016 for reviews). Historically and in more collectivistic cultures, romantic passion has been viewed as dangerous and disruptive to collective interests, pulling individuals away from their family structures or group (Hatfield et al., 2007). Nevertheless, with the growing spread of westernization leading to greater emphasis on the individual over the collective, as well as greater emphasis on the individual to select with whom or whether they wish to enter a romantic relationship, romantic passion has become increasingly valued and the basis of decisions to enter or exit romantic relationships in nearly all cultures (Hatfield & Rapson, 2006). Given that people around the world are making important, life-changing relationship decisions on the basis of romantic passion (or lack thereof), it is critical to better understand its source(s). Understanding how these feelings or motivations are formed is critical to understanding how one might control feelings of passion and summon them when desired.

3 | WHAT IS THE SOURCE OF ROMANTIC PASSION? A REVIEW OF FOUR THEORIES/MODELS

Whereas a growing consensus is emerging on the definition of passion—a strong motivational desire for union with a romantic partner—there is considerably less agreement about what is theorized to fuel this desire. In this review, we focus on four major theories or models, outlined in Table 1, that have attempted to explain what causes feelings of romantic passion: Limerence Theory (Tennov, 1979), the Rate of Change in Intimacy Model (Baumeister & Bratslavsky, 1999), the Self-Expansion Model (Aron & Aron, 1986), and the Triangular Theory Love (Sternberg, 1986). Although all four of these theories and models predict passion to peak early on in a relationship and steadily decline over time, the hypothesized source of this initial rise, dissipation, and possible recovery differs across theories. We summarize each of these theories and models, including their hypothesized source and trajectory of romantic passion, how passion might be “up-regulated” (i.e., intentionally increased), and evidence for and against each perspective, before highlighting their similarities and differences.

3.1 | Limerence Theory

Limerence Theory is one of the oldest theories on romantic passion, evolving out of Tennov's (1979) personal, qualitative interviews in her clinical practice. Thus, in contrast to the other theories reviewed here, which primarily emerged from quantitative research in social psychology, this theory is rooted more heavily in qualitative research in clinical psychology. According to Limerence Theory, the primary source of passionate feelings, cognitions, and behaviors is uncertainty over reciprocated romantic interest.

3.1.1 | Source and trajectory of passion

Limerence—an intense form of romantic passion characterized by obsessive, intrusive thoughts about a potential romantic partner—initially develops after a person admires and/or is physically attracted to another person for whom they believe there is some hint of possible reciprocity. Uncertainty and difficulty in obtaining that individual's

TABLE 1 Summary of passion theories/models

Theory	Source of passion	Trajectory	Controllability	Recommendations for up-regulation in long-term relationships
Limerence Theory (Tennov, 1979)	Uncertainty of reciprocation	Passion declines over time as certainty is reached over the existence of reciprocity or a lack of returned feelings.	Low; Individuals need to “recognize that limerence is basically involuntary. Love vows reflect intense feeling and total sincerity, but there is no way that they can be made to stick when feelings change.” (Tennov, 1979, p. 262, italics in original)	None
Rate of Change in Intimacy Model (Baumeister & Bratslavsky, 1999)	Rapid increases in intimacy	Passion declines over time as limits of intimacy are met and rises in intimacy slow.	Moderate; “As a derivative function, passion could respond to local changes in intimacy, and so anything that stimulates a temporary increase (or even the appearance of an increase) in intimacy may help ignite passion.” (Baumeister & Bratslavsky, 1999, p. 60)	Ration intimacy; engage in reductions of intimacy (e.g., physical separation, having a conflict); further increase intimacy (e.g., share new experiences, marital therapy)
Self-Expansion Model (Aron & Aron, 1986)	Expansion of the self	Passion declines over time as limits of closeness are met and self-expansion through one's relationship slows.	Moderate to High; “Shared participation in novel and arousing activities would represent an easily managed route for improving experienced relationship quality.” (Aron et al., 2000, p. 282)	Participate in novel, exciting, “expanding” activities with partner
Triangular Theory of Love (Sternberg, 1986)	Motivational drives and other forms of arousal	Passion declines over time as individuals become habituated to one's partner	Low; Individuals have “little control over the amount of motivational and other arousal of the passion component one experiences as a result of being with or even looking at another person.” (Sternberg, 1986, p. 120)	Analyze needs the relationship is fulfilling and ensure these needs continue to be met; analyze needs relationship is not currently fulfilling and try to meet these needs as well

affection are thought to result in the increased rumination characteristic of limerence, as well as increased perceived desirability of the potential partner. Indeed, many physiological correlates of limerence (e.g., heart palpitations, trembling) are much the same as feelings of fear, nervousness, and anxiety (Tennov, 1979). Passion typically grows in intensity until an individual becomes certain of their partner's reciprocated feelings (or lack thereof) or transfers to another partner, at which point passion for that individual plateaus and eventually declines. Although Limerence Theory grants that some individuals experience limerence for one person that lasts a lifetime, such cases are thought to be extremely rare. The average duration of limerent or passionate feelings in Tennov's (1979) estimation is approximately 2 years, based on her qualitative research, with the most typical interval ranging from 18 months to 3 years. Marriage is thought to be especially likely to reduce feelings of passion, as marriage represents one of the ultimate symbols of reciprocity of feelings, dramatically reducing uncertainty.

3.1.2 | Controllability and up-regulation of passion

Limerence Theory offers little advice for attempting to revive the limerent state, suggesting instead that it is possible for a relationship lacking limerence to persist through formal commitment or other forms of bonding that make it difficult from which to disengage. Furthermore, Tennov is skeptical not only of up-regulation, but also of down-regulation of limerence. When discussing what to do if one's romantic partner becomes limerent for someone else, Tennov's advice is to "Weep. Sympathize. Feel terrible. But recognize that limerence is basically involuntary. Love vows reflect intense feeling and total sincerity, but there is no way that they can be *made* to stick when feelings change" (p. 262).

3.1.3 | Evidence

Empirical support for uncertainty about reciprocity as a source of romantic passion has been largely mixed. In support of Limerence Theory, studies have found that early-stage romantic relationships, which are usually higher in passion, are also typically characterized by higher levels of partner-specific attachment anxiety (Eastwick & Finkel, 2008); that is, concern that their romantic partner does not want to be as close as they would like or does not care about them as much as they care about their partner. Anxiously attached individuals in established relationships also report greater sexual passion (a common component and correlate of romantic passion) for their partner, are more likely to maintain desire over time, and report greater desire for sex when they feel insecure about their partner's feelings (Davis et al., 2004). Thus, these findings suggesting that attachment anxiety is associated with greater desire provide some suggestive, but indirect, evidence that uncertainty over a partner's returned feelings may fuel passion.

Other studies have found evidence that individuals are most attracted to potential romantic partners in whom they are uncertain of their returned romantic interest. In one series of experimental studies, for instance, women reported the greatest attraction to profiles of men when they were uncertain of whether the man liked them "an average" or "above average" amount, compared to when they were certain that man liked them an "above average" amount (Whitchurch et al., 2011). However, in a subsequent investigation, this effect did not fully replicate, as attraction did not significantly differ between the certain liking and uncertain conditions; furthermore, when a within-subject design was employed, participants became more attracted to the profiles when they gained certainty that the individual liked them (Montoya et al., 2015). These conflicting results may be due to the relatively small sample sizes of both of these studies (47 and 78 participants, respectively). In other, more highly powered studies, uncertainty over being liked romantically has been negatively associated with romantic interest, especially in established relationships. For example, in an experiment in which participants interacted with a confederate over

an online messenger system, participants led to believe that their interaction partner had romantic interest in them rated the confederate as more sexually desirable and expressed greater interest in future interactions compared to those in an uncertain condition in which the confederate's romantic interest was left ambiguous (Birnbau et al., 2018).

Another potential reason for inconsistent findings across studies is that many of these studies use different measures of passion or attraction toward a potential romantic partner. Unfortunately, although the Passionate Love Scale (Hatfield & Sprecher, 1986) is well-established for use in ongoing relationships, there is no established equivalent in the context of initial interactions with strangers. Thus, a variety of assessments of romantic interest, attraction and sexual desire have been used across studies (e.g., sample items included "How much do you like him?" in Whitchurch et al., 2011 compared with "To what extent do you think that the other participant is sexually desirable?" in Birnbau et al., 2018).

Other investigations have looked at behavior that might instill a sense of uncertainty over another's reciprocity of feelings, such as a lack of responsiveness and playing "hard-to-get" (Birnbau et al., 2016; Birnbau & Reis, 2012; Dai et al., 2014; Reysen, & Katzarska-Miller, 2013). These studies too have found mixed evidence for uncertainty or certainty inducing behaviors increasing romantic passion. For example, in a series of studies that examined the influence of the responsiveness of opposite-sex strangers—that is, how understood, validated, and cared for the stranger made them feel, a potential signal of the stranger's romantic interest or desire for intimacy (Reis et al., 2004)—responsiveness decreased feelings of sexual desire among women, but increased sexual desire among men (Birnbau & Reis, 2012). This was suggested to be due to women being more selective, potentially perceiving responsive men as desperate and less dominant, making them less sexually appealing (Eastwick et al., 2007). In another series of studies, which only included male participants, participants liked an "easy-to-get" partner over a "hard-to-get" partner who seemed less interested in them romantically (Dai et al., 2014). Thus, uncertainty may potentially play a larger role in the development of feelings of passion for women. Overall, however, responsiveness and being "easy-to-get" were positively associated with sexual desire, suggesting that uncertainty over reciprocated feelings is only sometimes associated with increased passion in initial encounters.

Other studies have suggested yet further potential moderators for the role of uncertainty in fueling desire and passion. For example, in one study, responsiveness increased sexual desire among individuals low in attachment avoidance or high in attachment anxiety, but decreased sexual desire among individuals high in attachment avoidance or low in attachment anxiety (Birnbau & Reis, 2012). However, responsiveness was generally found to increase sexual desire in established relationships overall, especially among women (Birnbau et al., 2016). Other findings suggest that whether ambiguity and doubts over a potential romantic partner's romantic interest increase desire may depend on the physical attractiveness of that potential partner (Greitemeyer, 2010). Reciprocity may increase desire to a greater degree for individuals already deemed physically attractive, whereas some degree of ambiguity may increase desire for those who are moderately physically attractive or unattractive, perhaps by making these individuals seem more selective and conferring mate value.

Thus, it is largely unclear from the existing empirical evidence whether or to what extent uncertainty drives romantic passion. Given the number of conflicting findings, moderators, and variety of assessments used to examine the role of uncertainty over reciprocated feelings on romantic passion, this area is ripe for a more systematic, meta-analytic review.

3.2 | Rate of change in intimacy model

According to the Rate of Change in Intimacy Model (Baumeister & Bratslavsky, 1999), passion is the first derivative of intimacy over time.

3.2.1 | Source and trajectory of passion

According to this model, passion results from *increases* in intimacy that occur, for example, as romantic partners learn new details about one another, share new experiences, and communicate affection toward one another. Thus, this model suggests that when intimacy is rising quickly, passion will be high; in contrast, when intimacy is stable and no longer increasing (few new details and experiences are being shared), passion will be low. Given that there is often only so much information to be learned about a partner, intimacy often plateaus in relationships, at which point passion starts to decline. Thus, this model views intense passion as occurring primarily early on in relationships when increases in intimacy are the greatest followed by declines as intimacy plateaus.

3.2.2 | Controllability and up-regulation of passion

The Rate of Change in Intimacy Model holds a more optimistic view of the ability to increase passion in that it does offer some practical suggestions for improving passion. For example, given that this model suggests passion is driven by rapid increases in intimacy, it suggests that passion can be maintained longer by rationing intimacy so that partners can still learn more about one another and enhance intimacy later on in the relationship. Because Baumeister and Bratslavsky (1999) theorize that only so much passion can be felt at one time, they advise not to “use up” all opportunities for increased intimacy too quickly in early interactions. Other suggestions include engaging in reductions of intimacy, such as undergoing physical separation or engaging in conflict; however, they note that such strategies may have negative consequences for the relationship that could outweigh potential passion benefits. Finally, and perhaps most practically, they suggest engaging in activities with one’s partner that might help to further increase intimacy such as sharing new experiences or attending marital therapy which would likely increase mutual self-disclosure and understanding.

3.2.3 | Evidence

In support of this model, daily increases in intimacy as assessed by items capturing mutual self-disclosure, feelings of closeness, and communication of affection have been found to be associated with greater passion (Rubin & Campbell, 2012). However, this same investigation did not find support for absolute levels of intimacy (i.e., having achieved extremely high levels of intimacy) being associated with lower levels of passion. Thus, the prediction that intimacy eventually plateaus once high levels of intimacy are achieved, making ever greater increases in intimacy and, in turn, passion more difficult to achieve, was not supported. Similarly, overall higher levels of marital and sexual intimacy are associated with greater, not lower, levels of sexual desire (Birnbaum et al., 2007; Patton & Waring, 1985).

The previously discussed mixed evidence for responsiveness increasing sexual interest (Birnbaum & Reis, 2012; Birnbaum et al., 2016) may also be taken as mixed, although indirect, evidence for rises in intimacy being a source of romantic passion; that is, in addition to reducing uncertainty, responsiveness may also increase intimacy and closeness. For example, in one experimental study, men experienced greater sexual desire for a confederate who was responsive to the participant’s personal disclosure (Birnbaum & Reis, 2012), suggesting that the intimacy created by such an interaction fuels passionate feelings. However, women and those high in attachment avoidance in the same study reported lower levels of sexual desire for the responsive confederate, suggesting mixed or nuanced support for rises of intimacy being the ultimate source of passion.

Similarly, research showing that anxiously attached individuals report greater and more sustained sexual passion for their partner (Davis et al., 2004), as well as report greater sexual interest in responsive partners (Birnbaum & Reis, 2012), might also be seen as indirect evidence for the role of increases in intimacy in maintaining

passion. Individuals who are anxiously attached desire greater closeness and intimacy, and therefore may experience greater passion in response to increases in intimacy. Anxiously attached individuals also tend to experience greater fluctuations in intimacy due to their tendency for more volatile relationship conflict styles (Davis et al., 2004). Thus, greater passion among anxiously attached individuals could also be explained by these individuals experiencing larger or more frequent rises in intimacy. Furthermore, given that those who are avoidantly attached are less comfortable with and have a lower desire for intimacy, it would be hypothesized that they would be less likely to experience passion, especially as they tend to respond to disagreements by distancing from a partner (Davis et al., 2004). In support of this idea, individuals higher in attachment avoidance report lower levels of sexual passion and display greater declines in passion over time (Davis et al., 2004).

Other evidence for the role of rises in intimacy as a source of passion comes from studies involving the “fast friends” task in which individuals engage in mutual escalating disclosures (Aron et al., 1997; Slatcher, 2010; Welker et al., 2014). In these studies, newly acquainted pairs of participants as well as established couples reported greater attraction and passion when they engaged in the “fast friends” task as compared to a small-talk control task. Although this task is argued to increase self-expansion, as discussed later, it could equally (and more directly) be seen as experimental or causal support for rises in intimacy or closeness increasing passion, with numerous studies finding the task to increase feelings of closeness (Aron et al., 1997; Sedikides et al., 1999).

Thus, although somewhat mixed support has been found for the Rate of Change in Intimacy Model, overall, evidence suggests that rising levels of intimacy appear to be at least somewhat associated with feelings of romantic passion.

3.3 | Self-Expansion Model

Aron and Aron's (1986; 1996) Self-Expansion Model suggests yet a different source of romantic passion. Rather than passionate feelings arising from a state of uncertainty or increases in intimacy, Aron and Aron (1996) describe passion as arising from individuals expanding their sense of self through their romantic partner or self-expansion.

3.3.1 | Source and trajectory of passion

According to this model, individuals possess a fundamental motivation to expand the self, and a central pathway to do so is by forming relationships in which they *include the other in the self*, a process in which individuals self-expand by taking on their romantic partner's resources, perspectives, and characteristics. However, once a partner's qualities and resources have been well-integrated into the self, the rate of self-expansion slows, yielding a decline in romantic passion. Thus, the Self-Expansion Model of passion also predicts an initial spike in romantic desire followed by waning passion. According to this model, partners are chosen because they are perceived as providing the greatest or most likely opportunity for self-expansion, although not always consciously (Aron & Aron, 1996).

3.3.2 | Controllability and up-regulation of passion

The Self-Expansion Model also presents an optimistic view of the ability to induce passionate states in more established relationships. Although this model proposes that the ability to reach ever higher levels of self-expansion generally declines over time, Aron and colleagues (1986, 2000, 2004) suggest that further expansion, and thus increases in passion, can be achieved by participating in novel, exciting activities with one's partner. Passion can be achieved in long-term relationships by associating the partner or relationship with self-expanding activities (Aron & Aron, 1996): novel activities expand the self by providing new information and experiences.

3.3.3 | Evidence

In support of this model, individuals passionately in love tend to display greater overlap in their self-concept with a romantic partner and this self-other overlap tends to increase over time (Agnew et al., 1998; Aron et al., 1991; Aron & Fraley, 1999; Mashek et al., 2003; Quintard et al., 2018). However, in a rebuke of the argument that all individuals possess a fundamental motivation to expand their sense of self, recent work suggests that not all individuals equally desire to self-expand and some may actively resist self-expansion (Emery et al., 2015). The Self-Expansion Model does contend, however, that some individuals may have a reduced desire to self-expand due to experiences of failure or punishment associated with such efforts or due to too much self-other overlap being perceived as threatening to one's personal control or sense of identity (Aron & Aron, 1996; Aron et al., 2004).

There is also limited evidence for the assertion that individuals might be particularly attracted to partners who are likely to provide self-expansion opportunities. People tend to prefer individuals they perceive as similar to themselves (Byrne, 1961; Byrne et al., 1970; Montoya et al., 2008), suggesting that individuals do not attempt to maximize the potential for self-expansion by selecting individuals who have a greater number of novel traits and perspectives for them to acquire. However, this could be due to individuals believing that dissimilar others may not like them in return and therefore would ultimately not represent a potential partner who could provide self-expansion opportunities. In one study, for example, preferences for similar others disappeared when a relationship with that other individual was made to seem more likely (Aron et al., 2006).

In contrast, the idea put forth in the Self-Expansion Model that novel, exciting activities are a possible means for improving romantic passion has received empirical support (Aron et al., 2000; Coulter & Malouf, 2013; Muise et al., 2019a; Reissman et al., 1993). For instance, couples randomly assigned to engage in novel and exciting activities, compared with couples randomly assigned to engage in familiar and comfortable activities or a control condition in which couples were not instructed to engage in any activities, reported greater sexual desire for their partner (Muise et al., 2019a). Furthermore, engaging in novel, intimate discussions with strangers as a couple has been found to increase romantic passion by creating shared self-expansion experiences (Slatcher, 2010; Welker et al., 2014). In one study, for instance, couples assigned to engage in escalating self-disclosure with another couple (the “fast friends” task discussed earlier) displayed greater subsequent passion for their romantic partner compared to couples assigned to engage in a small-talk control task with another couple (Welker et al., 2014). Similarly, individuals with more creative personalities (i.e., personal traits and dispositions associated with individuals judged to be more creative) and who engage in more creative behaviors—behaviors that likely result in self-expansion—are better able to maintain romantic passion over time compared to less creative individuals (Carswell et al., 2019).

Thus, overall, self-expansion as a source of passion has also received a fair amount of empirical support, although again, with some qualifications.

3.4 | Triangular Theory of Love

Finally, in describing the three components of his Triangular Theory of Love, Sternberg (1986) describes passion (as opposed to intimacy and commitment) as originating from motivational drives and other forms of arousal that lead to romance, physical attraction, sexual consummation, and related phenomena.

3.4.1 | Source and trajectory of passion

These sources of arousal are said to arise from any number of needs being fulfilled by a romantic partner; in many cases these could be sexual needs, but it is equally possible that other needs, such as those of self-esteem, suc-corance, nurturance, affiliation, dominance, submission, and self-actualization, can be sources of motivational

arousal that lead to passion. Although this theory has received little theoretical and empirical attention, we interpret this arousal as being psychological or physical arousal associated with the motivational pursuit of a goal or need. When a romantic partner serves as an instrumental means for achieving one's goal or need, they become associated with this arousal. The Triangular Theory of Love also predicts that the trajectory of passion generally follows a pattern of steady decline after an initial rise. Declines in passion, according to this theory, occur largely due to habituation to a partner meeting one's needs, reducing the associated arousal.

3.4.2 | Controllability and up-regulation of passion

The Triangular Theory of Love describes passion as having low conscious controllability. Individuals have “little control over the amount of motivational and other arousal of the passion component one experiences as a result of being with or even looking at another person” (p. 120). This theory further views passion as highly unstable and suggests that the motivational arousal driving passion comes and goes rather unpredictably. Despite this skepticism over the ability to control feelings of passion, the theory does suggest, given this conceptualization of passion arising from needs being met by the partner, that a possible avenue for increasing passion might be to first analyze the needs that the partner currently is and is not fulfilling. The individual would then attempt to make their partner instrumental to some of these unfulfilled needs, for which they would not be habituated to their partner helping them meet.

3.4.3 | Evidence

Compared to the other three models and theories of romantic passion, the Triangular Theory of Love has received the least empirical attention. Given that limited research exists in support of this hypothesized source of romantic passion, perhaps due to the majority of empirical research related to this theory focusing on the taxonomy of the different components of love with the theorized source of passion being overlooked, we therefore review somewhat tangentially related research pertaining to relationships and goal pursuit. In support of this theory, research has found that individuals tend to draw closer to those who are helpful to their goals (Fitzsimons & Shah, 2008). However, this desire for closeness may dissipate once successful goal progress has been made (Fitzsimons & Fishbach, 2010). Recent research also suggests that individuals feel closer to partners who are instrumental to more of their goals (Orehek & Forest, 2016; Orehek et al., 2018), and that couples in which the male partner takes up a greater share of the housework have greater sexual frequency (Gager & Yabiku, 2010). Future research is needed, however, to fully evaluate whether need-fulfillment represents the primary source of passionate feelings, as well as whether there are particular needs that, when met by a romantic partner, are especially likely to fuel passion.

4 | TOWARD AN INTEGRATED PASSION MODEL

Although all four models and theories share some commonalities, such as largely being in-line with the empirically supported assertion that passion should normatively decrease over time after an initial spike (Acker & Davis, 1992; Carswell et al., 2019; Tucker & Aron, 1993), they offer divergent views of what ultimately causes passion. In particular, the Rate of Change in Intimacy Model and Limerence Theory appear to offer conflicting views on what drives passion, especially with regards to partner responsiveness. According to Limerence Theory, ambiguity over reciprocated romantic interest drives passion, suggesting that a highly responsive partner—whose attentiveness would likely suggest returned affection—would decrease feelings of passion. However, according to the Rate of

Change in Intimacy Model, having a partner be responsive to one's disclosures would increase intimacy and closeness, fueling passion. These theories also offer different suggestions about how one might best induce feelings of initial attraction and passion in a potential partner. For instance, Limerence Theory suggests that concealing the true extent of one's feelings for a partner (or "playing games") is an effective strategy for fueling a romantic interest's desire. By delaying perceived full reciprocation, this strategy is thought to allow the intensity of these feelings to continue to increase. According to this theory, fully reciprocating feelings early on may prevent the development of fully realized limerence and passion. In contrast, the Rate of Change in Intimacy Model would suggest that concealing one's feelings, as well as reducing disclosures and responsiveness inherent to "playing games" would hamper rises in intimacy, and result in a potential romantic partner having lower feelings of passion.

One reason why these two theories offer such conflicting predictions about how to best achieve romantic passion is that they may actually predict two different types of passion. Recent research suggests that romantic passion may be divided into two types (Acevedo & Aron, 2009; Graham, 2011): a more obsessive form and a form more strictly related to feelings of romantic love. In this dual model of passion, the obsessive form encapsulates the ruminative, cognitive preoccupation elements of romantic passion, whereas the romantic love form encapsulates longing for union without the obsessive element (Acevedo & Aron, 2009). Limerence Theory, given its focus on obsession and rumination, may more closely model the source of the obsessive form, whereas the Rate of Change in Intimacy Model may more closely model the source of the romantic love form.

One intriguing element of this dual model is that the obsessive form of passion declines much more precipitously in relationships than the romantic love form, which is far more robust, according to initial investigations (Acevedo & Aron, 2009). This suggests that some sources of romantic passion may be more critical at different relationship stages than others. For instance, uncertainty could be a stronger driver of passion earlier on in relationships, whereas increasing intimacy could be a stronger driver of passion as relationships become more established.

More recently, Ratelle and colleagues (2013) have similarly proposed that romantic passion may follow a dual model. Applying Vallerand and colleagues (2003) dual model of passion originally developed in the context of passion toward activities (e.g., work, education, sport, and leisure activities), this dual model suggests two different forms of romantic passion: the similarly named obsessive romantic passion and harmonious romantic passion (Carbonneau & Vallerand, 2013; Carbonneau et al., 2016; Paquette et al., 2020; Rapaport et al., 2018; Ratelle et al., 2013). In applying this theory of passion toward activities to romantic relationships, however, the meaning of romantic passion takes on a somewhat different meaning than the classic conceptualization of romantic passion or passionate love in relationship science. Although obsessive passion in this dual model somewhat closely follows from classic conceptualizations of romantic passion (e.g., top loading items from the obsessive romantic passion scale include "I'm emotionally dependent on my partner" and "I have difficulty controlling my need to see my partner"), and in particular, to items associated with the obsessive component identified by Acevedo and Aron (2009), the second form of passion—harmonious passion—does not closely align with the definition of romantic passion. Instead, harmonious passion might be more accurately characterized as a measure of relational self-expansion. For example, the two highest loading items of this scale (i.e., "The new things that I discover within our relationship allows me to appreciate my partner even more" and "My relationship with my partner allows me to live varied experiences"; Ratelle et al., 2013) appear to be quite similar to items in established measures of self-expansion (i.e., "How much does your partner help to expand your sense of the kind of person you are?" and "How much does being with your partner result in you having new experiences?"; Lewandowski & Aron, 2002). Given that self-expansion is theorized to be a source of passion rather than a measure of passion itself and that harmonious passion, according to this new model, does not include a longing or desire for union with a romantic partner in its definition, this assessment and theory may be less relevant to assessing romantic passion and its source as classically conceptualized in relationship science. However, this model does highlight the need for better integration across the field of romantic passion, as well as better integration of research on passion for activities and romantic passion as they may be mutually informative.

In contrast to the differences apparent between the Rate of Change in Intimacy Model and Limerence Theory, on first blush, the Rate of Change in Intimacy Model and Self-Expansion Model appear to hold largely similar predictions regarding the source of romantic passion. However, rises in intimacy and self-expansion as sources of passion offer subtly, but critically different, predictions for when passion would arise. More specifically, the Self-Expansion Model predicts that passion increases when one takes on the resources, perspectives, and identities of a romantic partner. Although this may easily take place through intimate discussions, acquiring a partner's resources and qualities would be best achieved through partner disclosures. In contrast, in the same intimate discussion, passion through rises in intimacy according to the Rate of Change in Intimacy Model would be best achieved by one's own disclosures that are then validated by a romantic partner. Thus, these two models might offer divergent predictions for when passion would arise based on whether one is sharing with versus receiving intimate disclosures from a romantic partner.

Another critical difference between these models is that the Self-Expansion Model presumes that positive growth of an individual's sense of self precedes feelings of passion, whereas the Rate of Change in Intimacy Model does not require any changes to an individual's self-concept for passion to arise. It is unclear whether perceived self-growth is necessary to experience passion. Is having a novel, exciting experience that does not grow one's sense of self equally likely to increase feelings of passion? For example, in the "bridge study," men found an attractive female confederate more attractive when they met her on a scary suspension bridge than on a safe, stable footbridge (Dutton & Aron, 1974). This increased attraction was likely due to a misattribution of arousal and not due to self-change. One might suggest that effects of self-expansion are due to misattribution of arousal (either physical or psychological) rather than self-change (Foster et al., 1998; White et al., 1981). The Rate of Change in Intimacy Model, on the other hand, makes no presumptions of changes in self-concept. Instead, any experience that would increase connection and closeness to a romantic partner is theorized to increase passion. Furthermore, experiencing physical or psychological arousal would also not be required to feel passion; engaging in familiar and comfortable activities that enhance closeness and connection should be equally likely to enhance passion as engaging in novel and exciting ones, somewhat in conflict with empirical evidence (Muise et al., 2019a).

In contrast to both of these models, the Triangular Theory of Love suggests that achieving self-expansion and intimacy through a romantic partner may just be two of many goals that partners might meet that may drive passion. Although self-expansion and intimacy are perhaps especially central needs, and ones that are likely met by romantic partners, the Triangular Theory of Love offers a broader view of what drives romantic passion—that is, motivational arousal from a partner meeting any psychological need or goal. Thus, the Self-Expansion Model and Rate of Change in Intimacy may offer just a couple of many pathways through which passion might be increased. That said, it is unclear whether a partner meeting any need or goal can increase passion or whether having only certain needs met by a partner sparks passionate feelings. Passion might only increase if a partner meets needs that increase their overall perceived mate value. For example, if a partner meeting certain needs also highlights a partner in a negative light (e.g., arguing with a waiter on your behalf, but simultaneously highlighting their own disagreeableness), it may not increase feelings of passion. On the other hand, taking on a partner's resources (material, knowledge, and social assets that can facilitate one's goals; Aron et al., 2004) as described in the Self-Expansion Model might subsume what is discussed in the Triangular Theory of Love's hypothesis that newly met needs drive passion, suggesting the Self-Expansion Model might equally be considered a more inclusive and general theory or model.

5 | FUTURE DIRECTIONS

One potential criticism of all of these models is the potential for bidirectionality of observed associations. For example, it is unclear whether rises in intimacy are the cause or consequence of romantic passion. Given that passion is defined as a desire for intimacy, it seems unclear whether rises in intimacy as described by the Rate of

Change in Intimacy Model (Baumeister & Bratslavsky, 1999) are the cause of passion or the result of passion. If an individual feels passion for a partner—that is, desires intimacy with a partner—it is perhaps unsurprising that they would then seek out and achieve greater intimacy with that partner. The Self-Expansion Model suffers from similar issues of directionality. Although individuals display increased self-concepts that include a greater number of content domains when answering the question “who are you today?” after falling in love compared to before (Aron et al., 1995), it is unclear whether this is the cause or consequence of passion. When passionately in love, partners may spend hours or all night talking and learning about one another, not because this fuels their love, but because this is what they crave when they are in love. This appetite for reciprocal self-disclosure then leads to greater self-other overlap as one learns and takes on the traits of their partner. Similarly, individuals might adopt their partner's traits to increase closeness or engage in self-growth to make themselves more appealing to their partner.

Given that these four theories and models largely predated recent findings suggesting people can and do report feeling intense passion for more than one person at a time (Balzarini et al., 2019; Muise et al., 2019b), they do not consider consensually nonmonogamous relationships. For example, with the exception of Limerence Theory, these perspectives do not offer predictions for how passion for one partner may affect passion for another. Limerence Theory, as previously mentioned, suggests that limerence can only be felt for one person at a time (Tennov, 1979). Future research might examine whether obsessive passion might be felt for multiple individuals simultaneously, or whether such intense rumination is only possible for one individual at a time given how cognitively demanding such obsession may be. However, it might be just as likely that thoughts about one romantic partner could spur related thoughts about another if they are cognitively linked, and thus fueling rather than extinguishing even this potentially more fragile form of passion.

Future work is also needed to better integrate and contrast the competing predictions of these theories. For example, future research might experimentally manipulate whether one is the source or the recipient of disclosure, or both, in an effort to disentangle whether intimacy or self-expansion is a primary source of passion. If rising intimacy is the primary source of passion, either of these conditions might be likely to produce feelings of closeness and intimacy, although perhaps disclosing and having those disclosures accepted warmly might be especially likely to induce passion. In contrast, only disclosing to partner should do little to enhance passion according to self-expansion theory; instead, a partner disclosing new traits or perspectives would mainly achieve self-expansion, and in turn, passion.

Furthermore, although previous studies have experimentally increased passion or sexual desire for a romantic partner through reciprocal disclosure (e.g., Welker et al., 2014) or shared self-expanding experiences (e.g., Muise et al., 2019a), these studies often omit critical tests of the mechanism through which these manipulations increase passion. Future studies ought to measure and test whether increased intimacy, uncertainty, motivational arousal, or self-growth mediates such effects or manipulate them more directly. For example, recent research suggests individuals spontaneously take on even fictionalized traits that have been randomly assigned to a partner (Slotter & Gardner, 2009). Experimentally manipulating whether a partner discloses a novel or existing trait, and then measuring subsequent trait adoption and passion, might be one way to test whether self-concept growth specifically drives passion.

The ultimate source of passion may likely be a mix of all these sources. However, without considering how these models and theories conflict, interact and might be integrated, we may overlook new or more precise ways to cultivate passion. In particular, the Triangular Theory of Love's more motivational take on the source of romantic passion remains underdeveloped, but in light of emerging work on relationships and goal pursuit (Fitzsimons & Fishbach, 2010; Fitzsimons & Shah, 2008; Orehek & Forest, 2016; Orehek et al., 2018), this could be a particularly fruitful area for novel ways of achieving passion. In reviewing existing theories and models of romantic passion, we hope this review will inspire new, more refined models of romantic passion that integrate across these theories and models.

6 | CONCLUSION

Although four major models and theories have been proposed for understanding what fuels romantic passion, these perspectives have largely developed separately with few attempts to identify ways in which they might conflict or be integrated. In this integrative review, we have identified critical ways in which they suggest divergent predictions and future research that may improve our understanding of what ultimately drives passion.

ACKNOWLEDGMENTS

This work has been supported in part by a postdoctoral fellowship from the Office of VP-Research at University of Toronto Mississauga awarded to Kathleen L. Carswell and a Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Grant awarded to Emily A. Impett. The opinions and conclusions expressed herein are those of the authors and do not necessarily reflect the opinions of the SSHRC.

ORCID

Kathleen L. Carswell  <https://orcid.org/0000-0001-9442-280X>

Emily A. Impett  <https://orcid.org/0000-0003-3348-7524>

REFERENCES

- Acevedo, B. P., & Aron, A. (2009). Does a long-term relationship kill romantic love? *Review of General Psychology*, *13*, 59–65.
- Acevedo, B. P., Aron, A., Fisher, H. E., & Brown, L. L. (2011). Neural correlates of long-term intense romantic love. *Social Cognitive and Affective Neuroscience*, *7*, 145–159.
- Acker, M., & Davis, M. H. (1992). Intimacy, passion and commitment in adult romantic relationships: A test of the triangular theory of love. *Journal of Social and Personal Relationships*, *9*, 21–50.
- Agnew, C. R., Van Lange, P. A., Rusbult, C. E., & Langston, C. A. (1998). Cognitive interdependence: Commitment and the mental representation of close relationships. *Journal of Personality and Social Psychology*, *74*, 939–954.
- Aron, A., & Aron, E. N. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. Hemisphere Publishing Corp/Harper & Row Publishers.
- Aron, A., & Aron, E. N. (1996). Self and self-expansion in relationships. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 325–344). Erlbaum.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, *60*, 241–253.
- Aron, A., Fisher, H., Mashek, D. J., Strong, G., Li, H., & Brown, L. L. (2005). Reward, motivation, and emotion systems associated with early-stage intense romantic love. *Journal of Neurophysiology*, *94*, 327–337.
- Aron, A., & Fraley, B. (1999). Relationship closeness as including other in the self: Cognitive underpinnings and measures. *Social Cognition*, *17*, 140–160.
- Aron, A., McLaughlin-Volpe, T., Mashek, D., Lewandowski, G., Wright, S. C., & Aron, E. N. (2004). Including others in the self. *European Review of Social Psychology*, *15*, 101–132.
- Aron, A., Melinat, E., Aron, E. N., Vallone, R., & Bator, R. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin*, *23*, 363–377.
- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology*, *78*, 273–284.
- Aron, A., Paris, M., & Aron, E. N. (1995). Falling in love: Prospective studies of self-concept change. *Journal of Personality and Social Psychology*, *69*, 1102–1112.
- Aron, A., Steele, J. L., Kashdan, T. B., & Perez, M. (2006). When similars do not attract: Tests of a prediction from the self-expansion model. *Personal Relationships*, *13*, 387–396.
- Aron, A., & Westbay, L. (1996). Dimensions of the prototype of love. *Journal of Personality and Social Psychology*, *70*, 535–551.
- Aron, A., Mashek, D. J., & Aron, E. N. (2004). Closeness as including other in the self. In *Handbook of closeness and intimacy* (pp. 37–52). Psychology Press.
- Balzarini, R. N., Dharma, C., Muise, A., & Kohut, T. (2019). Eroticism versus nurturance: How eroticism and nurturance differs in polyamorous and monogamous relationships. *Social Psychology*, *50*, 185–200.
- Bartels, A., & Zeki, S. (2000). The neural basis of romantic love. *Neuroreport*, *11*, 3829–3834.

- Baumeister, R. F., & Bratslavsky, E. (1999). Passion, intimacy, and time: Passionate love as a function of change in intimacy. *Personality and Social Psychology Review*, 3, 49–67.
- Birnbaum, G. E., Cohen, O., & Wertheimer, V. (2007). Is it all about intimacy? Age, menopausal status, and women's sexuality. *Personal Relationships*, 14, 167–185.
- Birnbaum, G. E., Kanat-Maymon, Y., Mizrahi, M., Barniv, A., Nagar, S., Govinden, J., & Reis, H. T. (2018). Are you into me? Uncertainty and sexual desire in online encounters and established relationships. *Computers in Human Behavior*, 85, 372–384.
- Birnbaum, G. E., & Reis, H. T. (2012). When does responsiveness pique sexual interest? Attachment and sexual desire in initial acquaintanceships. *Personality and Social Psychology Bulletin*, 38, 946–958.
- Birnbaum, G. E., Reis, H. T., Mizrahi, M., Kanat-Maymon, Y., Sass, O., & Granovski-Milner, C. (2016). Intimately connected: The importance of partner responsiveness for experiencing sexual desire. *Journal of Personality and Social Psychology*, 111, 530–546.
- Bulmer, M., & Izuma, K. (2018). Implicit and explicit attitudes toward sex and romance in asexuals. *The Journal of Sex Research*, 55, 962–974.
- Byrne, D. (1961). Interpersonal attraction and attitude similarity. *Journal of Abnormal and Social Psychology*, 62, 713–715.
- Byrne, D., Ervin, C., & Lamberth, J. (1970). Continuity between the experimental study of attraction and real-life computer dating. *Journal of Personality and Social Psychology*, 16, 157–165.
- Carbonneau, N., & Vallerand, R. J. (2013). On the role of harmonious and obsessive romantic passion in conflict behavior. *Motivation and Emotion*, 37, 743–757.
- Carbonneau, N., Vallerand, R. J., Lavigne, G. L., & Paquet, Y. (2016). "I'm not the same person since I met you": The role of romantic passion in how people change when they get involved in a romantic relationship. *Motivation and Emotion*, 40, 101–117.
- Carswell, K. L., & Finkel, E. J. (2018). Can you get the magic back? The moderating effect of passion decay beliefs on relationship commitment. *Journal of Personality and Social Psychology*, 115, 1002–1033.
- Carswell, K. L., Finkel, E. J., & Kumashiro, M. (2019). Creativity and romantic passion. *Journal of Personality and Social Psychology*, 116, 919–941.
- Coulter, K., & Malouff, J. M. (2013). Effects of an intervention designed to enhance romantic relationship excitement: A randomized-control trial. *Couple and Family Psychology: Research and Practice*, 2, 34–44.
- Dai, X., Dong, P., & Jia, J. S. (2014). When does playing hard to get increase romantic attraction? *Journal of Experimental Psychology: General*, 143, 521–526.
- Davis, D., Shaver, P. R., & Vernon, M. L. (2004). Attachment style and subjective motivations for sex. *Personality and Social Psychology Bulletin*, 30, 1076–1090.
- Diamond, L. M. (2003). What does sexual orientation orient? A biobehavioral model distinguishing romantic love and sexual desire. *Psychological Review*, 110, 173–192.
- Diamond, L. M. (2004). Emerging perspectives on distinctions between romantic love and sexual desire. *Current Directions in Psychological Science*, 13, 116–119.
- Dutton, D. G., & Aron, A. P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of Personality and Social Psychology*, 30, 510–517.
- Eastwick, P. W., & Finkel, E. J. (2008). The attachment system in fledgling relationships: An activating role for attachment anxiety. *Journal of Personality and Social Psychology*, 95, 628–647.
- Eastwick, P. W., Finkel, E. J., Mochon, D., & Ariely, D. (2007). Selective versus unselective romantic desire: Not all reciprocity is created equal. *Psychological Science*, 18, 317–319.
- Emery, L. F., Walsh, C., & Slotter, E. B. (2015). Knowing who you are and adding to it: Reduced self-concept clarity predicts reduced self-expansion. *Social Psychological and Personality Science*, 6, 259–266.
- Fehr, B. (1994). Prototype-based assessment of laypeople's views of love. *Personal Relationships*, 1, 309–331.
- Fisher, H., Aron, A., & Brown, L. L. (2005). Romantic love: An fMRI study of a neural mechanism for mate choice. *Journal of Comparative Neurology*, 493, 58–62.
- Fisher, H. E. (1998). Lust, attraction, and attachment in mammalian reproduction. *Human Nature*, 9, 23–52.
- Fisher, H. E., Aron, A., Mashek, D., Li, H., & Brown, L. L. (2002). Defining the brain systems of lust, romantic attraction, and attachment. *Archives of Sexual Behavior*, 31, 413–419.
- Fisher, H. E., Xu, X., Aron, A., & Brown, L. L. (2016). Intense, passionate, romantic love: A natural addiction? How the fields that investigate romance and substance abuse can inform each other. *Frontiers in Psychology*, 7, 687.
- Fitzsimons, G. M., & Fishbach, A. (2010). Shifting closeness: Interpersonal effects of personal goal progress. *Journal of Personality and Social Psychology*, 98, 535–549.
- Fitzsimons, G. M., & Shah, J. Y. (2008). How goal instrumentality shapes relationship evaluations. *Journal of Personality and Social Psychology*, 95, 319–337.

- Foster, C. A., Witcher, B. S., Campbell, W. K., & Green, J. D. (1998). Arousal and attraction: Evidence for automatic and controlled processes. *Journal of Personality and Social Psychology*, 74, 86–101.
- Gager, C. T., & Yabiku, S. T. (2010). Who has the time? The relationship between household labor time and sexual frequency. *Journal of Family Issues*, 31, 135–163.
- Graham, J. M. (2011). Measuring love in romantic relationships: A meta-analysis. *Journal of Social and Personal Relationships*, 28, 748–771.
- Greitemeyer, T. (2010). Effects of reciprocity on attraction: The role of a partner's physical attractiveness. *Personal Relationships*, 17, 317–330.
- Hatfield, E., Bensman, L., & Rapson, R. L. (2012). A brief history of social scientists' attempts to measure passionate love. *Journal of Social and Personal Relationships*, 29, 143–164.
- Hatfield, E., Feybesse, C., Narine, V., & Rapson, R. L. (2016). Passionate love: Inspired by angels or demons? In K. Aumer (Ed.), *The psychology of love and hate in intimate relationships* (pp. 65–82). Springer.
- Hatfield, E., & Rapson, R. L. (2006). Passionate love, sexual desire, and mate selection: Cross-cultural and historical perspectives. In P. Noller & J. Feeney (Eds.), *Close relationships: Functions, forms and processes* (pp. 227–243). Psychology Press.
- Hatfield, E., Rapson, R. L., & Martel, L. D. (2007). Passionate love and sexual desire. In S. Kitayama & D. Cohen (Eds.), *Handbook of Cultural Psychology* (pp. 760–779). Guilford Press.
- Hatfield, E., Schmitz, E., Cornelius, J., & Rapson, R. L. (1988). Passionate love: How early does it begin? *Journal of Psychology & Human Sexuality*, 1, 35–51.
- Hatfield, E., & Sprecher, S. (1986). Measuring passionate love in intimate relationships. *Journal of Adolescence*, 9, 383–410.
- Hatfield, E., & Walster, G. W. (1978). *A new look at love*. Addison-Wesley.
- Hendrick, C., & Hendrick, S. S. (1989). Research on love: Does it measure up? *Journal of Personality and Social Psychology*, 56, 784–794.
- Lewandowski, G. W., Jr. & Aron, A. (2002). The self-expansion scale: Construction and validation. In *Third annual meeting of the Society of Personality and Social Psychology*, Savannah, GA.
- Mashek, D. J., Aron, A., & Boncimino, M. (2003). Confusions of self with close others. *Personality and Social Psychology Bulletin*, 29, 382–392.
- Meyers, S. A., & Berscheid, E. (1997). The language of love: The difference a preposition makes. *Personality and Social Psychology Bulletin*, 23, 347–362.
- Montoya, R. M., Faiella, C. M., Lynch, B. P., Thomas, S., & Deluca, H. K. (2015). Further exploring the relation between uncertainty and attraction. *Psychologia*, 58, 84–97.
- Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and Personal Relationships*, 25, 889–922.
- Muise, A., Harasymchuk, C., Day, L. C., Bacev-Giles, C., Gere, J., & Impett, E. A. (2019a). Broadening your horizons: Self-expanding activities promote desire and satisfaction in established romantic relationships. *Journal of Personality and Social Psychology*, 116, 237–258.
- Muise, A., Laughton, A. K., Moors, A., & Impett, E. A. (2019b). Sexual need fulfillment and satisfaction in consensually nonmonogamous relationships. *Journal of Social and Personal Relationships*, 36, 1917–1938.
- Orehek, E., & Forest, A. L. (2016). When people serve as means to goals: Implications of a motivational account of close relationships. *Current Directions in Psychological Science*, 25(2), 79–84.
- Orehek, E., Forest, A. L., & Wingrove, S. (2018). People as means to multiple goals: Implications for interpersonal relationships. *Personality and Social Psychology Bulletin*, 44, 1487–1501.
- Paquette, V., Rapaport, M., St-Louis, A. C., & Vallerand, R. J. (2020). Why are you passionately in love? Attachment styles as determinants of romantic passion and conflict resolution strategies. *Motivation and Emotion*, 44, 621–639.
- Patton, D., & Waring, E. M. (1985). Sex and marital intimacy. *Journal of Sex & Marital Therapy*, 11, 176–184.
- Quintard, V., Jouffre, S., Croizet, J. C., & Bouquet, C. A. (2018). The influence of passionate love on self–other discrimination during joint action. *Psychological Research*, 84, 51–61.
- Rapaport, M., Carbonneau, N., St-Louis, A. C., Rochette, S., & Vallerand, R. J. (2018). More than shared love: Does sharing a passionate activity with a romantic partner strengthen the relationship? *International Journal of Applied Positive Psychology*, 2, 61–78.
- Ratelle, C. F., Carbonneau, N., Vallerand, R. J., & Mageau, G. (2013). Passion in the romantic sphere: A look at relational outcomes. *Motivation and Emotion*, 37, 106–120.
- Reis, H. T., & Aron, A. (2008). Love: What is it, why does it matter, and how does it operate? *Perspectives on Psychological Science*, 3, 80–86.
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Erlbaum.

- Reissman, C., Aron, A., & Bergen, M. R. (1993). Shared activities and marital satisfaction: Causal direction and self-expansion versus boredom. *Journal of Social and Personal Relationships*, *10*, 243–254.
- Reysen, S., & Katzarska-Millerb, I. (2013). Playing moderately hard to get. *Interpersona*, *7*, 260–271.
- Rubin, H., & Campbell, L. (2012). Day-to-day changes in intimacy predict heightened relationship passion, sexual occurrence, and sexual satisfaction: A dyadic diary analysis. *Social Psychological and Personality Science*, *3*, 224–231.
- Sedikides, C., Campbell, W. K., Reader, G. D., & Elliot, A. J. (1999). The relationship closeness induction task. *Representative Research in Social Psychology*, *23*, 1–4.
- Simpson, J. A., Campbell, B., & Berscheid, E. (1986). The association between romantic love and marriage: Kephart (1967) twice revisited. *Personality and Social Psychology Bulletin*, *12*, 363–372.
- Slatcher, R. B. (2010). When Harry and Sally met dick and Jane: Creating closeness between couples. *Personal Relationships*, *17*, 279–297.
- Slotter, E. B., & Gardner, W. L. (2009). Where do “You” end and “I” begin? Pre-emptive self-other inclusion as a motivated process. *Journal of Personality and Social Psychology*, *96*, 1137–1151.
- Sprecher, S., & Regan, P. C. (1998). Passionate and companionate love in courting and young married couples. *Sociological Inquiry*, *68*, 163–185.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, *93*, 119–135.
- Tennov, D. (1979). *Love and limerence: The experience of being in love*. Stein & Day.
- Tucker, P., & Aron, A. (1993). Passionate love and marital satisfaction at key transition points in the family life cycle. *Journal of Social and Clinical Psychology*, *12*, 135–147.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagne, M., & Marsolais, J. (2003). Les passions de l'ame: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, *85*, 756–767.
- Welker, K. M., Baker, L., Padilla, A., Holmes, H., Aron, A., & Slatcher, R. B. (2014). Effects of self-disclosure and responsiveness between couples on passionate love within couples. *Personal Relationships*, *21*, 692–708.
- Whitchurch, E. R., Wilson, T. D., & Gilbert, D. T. (2011). “He loves me, he loves me not...” Uncertainty can increase romantic attraction. *Psychological Science*, *22*, 172–175.
- White, G. L., Fishbein, S., & Rutsein, J. (1981). Passionate love and the misattribution of arousal. *Journal of Personality and Social Psychology*, *41*, 56–62.

How to cite this article: Carswell, K. L., & Impett, E. A. (2021). What fuels passion? An integrative review of competing theories of romantic passion. *Social and Personality Psychology Compass*, e12629. <https://doi.org/10.1111/spc3.12629>